2003 0535
IGSL

City of Wasco
Circulation Element Update

Final Report

Prepared For
City of Wasco

Prepared By

omni·means
ENGINEERS · PLANNERS

ORDINANCE NO. 00-448 OF THE
CITY OF WASCO

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF WASCO REVISING THE CIRCULATION ELEMENT OF THE GENERAL PLAN

WHEREAS, the City of Wasco pursuant to its power and authority has adopted a Circulation Element; and

WHEREAS, the City desires to revise its circulation element to ensure adequate infrastructure related to future City growth is constructed to help protect the health and welfare of the City of Wasco residents.

NOW, THEREFORE, the City Council of the City of Wasco does ordain as follows:

Section 1. The Circulation Element of the General Plan is hereby revised as set forth in Exhibit "A" attached hereto as if fully incorporated herein.

Section 2. If any section, subsection, subdivision, sentence, clause, phrase or portion of this ordinance, or the application thereof to any person or place, is for any reason held to be unconstitutional or invalid by the decision of a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance or its application to other persons or places.

Section 3. The City Clerk is ordered to publish this Ordinance in summary form in accordance with law, in a newspaper of general circulation in the City.

SIGNED AND ADOPTED this 21st of November, 2000.

Michael W. White

Michael W. White, Mayor
City of Wasco, California

PASSED AND ADOPTED this 21st of November, 2000, by the following vote:

AYES: Councilmembers White, Hardin, Neufeld, Wegman, West

NOES: NONE

ABSENT: NONE

ABSTAIN: NONE

Rachel Rodriguez

Dru Gibson, City Clerk
City of Wasco, California
Rachel Rodriguez, Deputy

2003 0535

CITY OF WASCO

CIRCULATION ELEMENT UPDATE

ADMINISTRATIVE DRAFT REPORT

Prepared For
City of Wasco

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May 5, 2000

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SECTION IV
CIRCULATION ELEMENT

4.0 PURPOSE

The purpose of the Circulation Element of the General Plan is to provide guidance, by means of goals, policies and programs for the achievement of an efficient and effective transportation and infrastructure system within and surrounding the City of Wasco.

The scope of the Circulation Element is defined in Section 65302(b) of the Government Code which specifies, in part, that:

> *"A Circulation Element consist(s) of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the Land Use Element of the General Plan"*

In addition, the Circulation Element should be coordinated with the policies and goals specified in the other elements of the General Plan. The 1992 Circulation Element of the Wasco General Plan is substantially coordinated with the 1992 Kern County Circulation Element and includes all new street designations.

The Plan for Circulation is composed of several sections, each of which deals with an important component of the overall transportation system. The Plan sections are:

1. Vehicle Circulation (includes Autos and Trucks)
2. Mass Transit
3. Pedestrian Circulation
4. Bicycle Circulation
5. City Infrastructure

The general objective of this Element is to achieve (to the extent possible) the desired goals, policies and objectives of the community. However, specific goals and policies may not always be in harmony. Taken in total, the overall goals and policies within the General Plan provide a framework from which to weigh the advantages, disadvantages, costs and benefits of the various development alternatives.

4.1 CONDITIONS AND TRENDS

The conditions and trends described within this section include an analysis of the existing system of streets and highways, transit needs, railroad operations, bicycle and pedestrian transportation facilities, airports, pipelines and parking. Land use trends and their relationship to circulation system demand are also analyzed.

The location and distribution of arterial, collectors and local streets is dependent on the location and traffic generation of different land uses in the urban area. Each type of land use generates a different quantity and quality of vehicular trips per acre; therefore, assignment of the appropriate frequency (ie. one-half mile, one-quarter mile, etc.) of each functional roadway classification to an area depends on

the traffic generation characteristics of each area. Figure shows the land use distribution designated in the Land Use Element of the General Plan. Table 4.1.1 shows the recommended arterial and collector grid frequency rated for the various land uses in the City of Wasco.

TABLE 4.1.1
CITY OF WASCO
TRAFFIC GENERATION AND GRID FREQUENCY BY LAND USE

Type of Land Use	ADT Per Acre	Arterial Grid Frequency (miles)	Collector Grid Frequency (miles)
Low Density Residential (1 to 13 Units per Acre)	60	1	1/2
Medium Density Residential (14 to 25 Units per Acre)	150	1	1/4
Commercial	1,200	1/2	1/4
Industrial (light)	50	1	1/2
City Park	60	1	1/2
High School	200	1/2	1/4
Elementary School	90	1	1/2
Civic Center	450	1/2	1/4

Source: QUAD Consultants, 1982; ITE Handbook 1978.

A. EXISTING AND FUTURE STREET SYSTEM

ROADWAY CLASSIFICATIONS

The existing network of streets is shown in Figure 4.1.1. The street system is composed of a general pattern of state highway, arterial, collectors and local streets, each of which provide varying degrees of direct access to abutting property. Figure 4.1.1 also indicates roadway classifications for the different streets that constitute the City's Circulation System.

Arterial and collector roads are used to provide safe and efficient movement between major employment destinations and residential neighborhoods. Arterial roads are generally located at one-mile intervals along section lines, while collector roads are located along mid-section lines. Because of their spacing and function, arterial and collector roads tend to define individual neighborhoods within the City.

1. Highways

   Highways function to provide high speed/high volume routes between major population centers. Two State Highways currently exist within the City of Wasco; Highway 46 and Highway 43. Highway 43 runs north-south and Highway 46 runs east-west. Each of these facilities provide interregional travel within and through the City. Improvements on both of these facilities are subject to State (Caltrans) approval in terms of alignment, right-of-way, and lane configurations. All State facilities must be designed and constructed according to current State design standards.

2. Arterial

The primary function of an arterial is to provide efficient through and cross-town traffic. Direct access to abutting property is minimized, where possible, to maintain free movement of potentially high traffic volumes. The standard cross section of a typical arterial roadway is shown in Figure 4.1.2; however, certain aesthetic or traffic requirements could require the usage of other standards in order to accommodate specific roadway needs. Arterials within Wasco typically have a design capacity of approximately 29,000 ADT.

3. Collectors

Collector streets provide the traffic movement between arterial and local streets, carrying a large share of the intra-city traffic. They also provide the primary link between different neighborhoods and to the downtown area. In addition, collectors may serve as truck routes, especially for the delivery and pick-up of goods where arterial do not abut that land use. Collectors in Wasco typically have a design capacity in excess of 14,500 ADT. A typical collector cross-section is illustrated in Figure 4.1.3; however, certain situations may exist which would require the use of other standards in order to accommodate aesthetic or traffic requirements.

4. Local Street

The primary function of local streets is to provide access to collector streets from abutting lands. They are designed to minimize through traffic movements, typically terminating at their intersection with collectors and frequently curved or terminated in cul-de-sac's. Local streets vehicular capacities range from 1,500 to 3,000 ADT. To ensure pedestrian and bicyclist safety Local Streets should be designed to have volumes of 1,500 ADT. A typical local street cross-section is shown in Figure 4.1.4; however, certain aesthetic or traffic situations may exist which could require the usage of other street standards.

CITY OF WASCO
CIRCULATION ELEMENT

MC COMBS

GROMER

GROMER

PALM

SR-46

MAGNOLIA

CENTRAL

BECKES

GRIFFITH

7TH

6TH

POSO

SCOFIELD

WESTERN

MAGNOLIA

CENTRAL

PALM

POPLAR

FILBURN

GRIFFITH

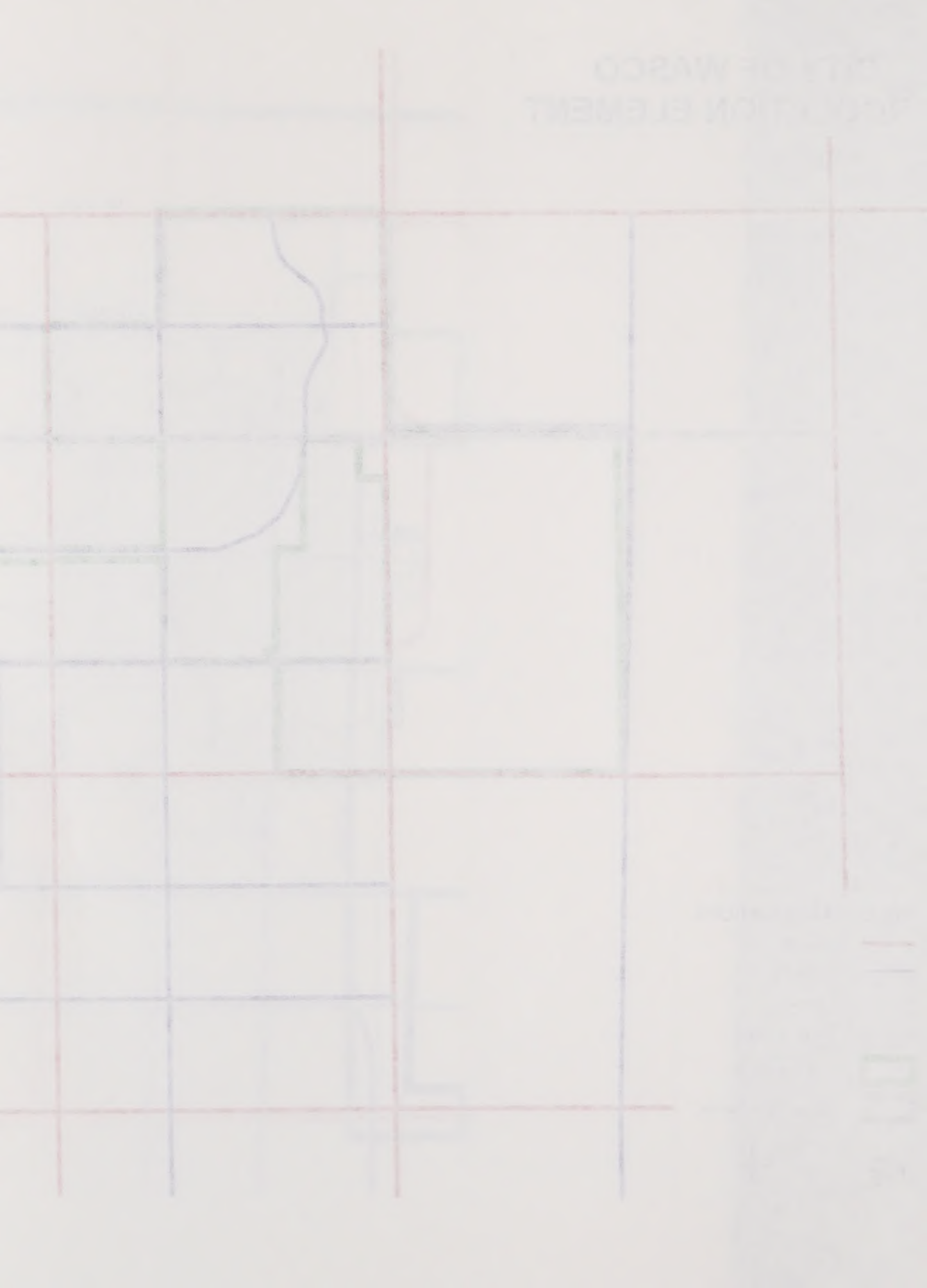
SR-43/F ST

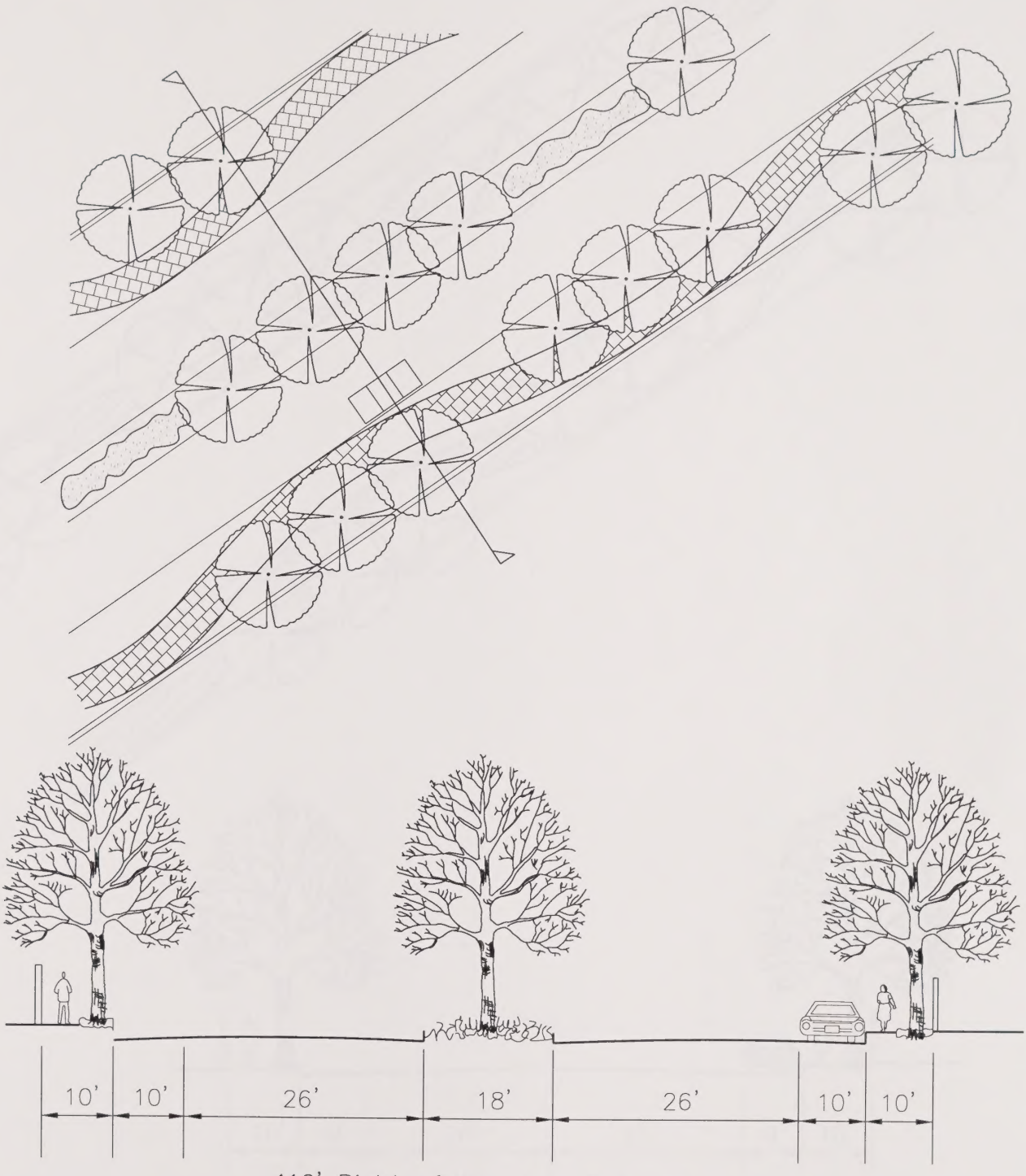
JACKSON

ROAD CLASSIFICATIONS

- Arterial
- Collector
- Highways
- Local
- City Boundary
- Sphere of Influence

N





110' Right of Way 4 to 6 Lanes
N.T.S.

City of Wasco Circulation Element

Figure 4.1.2

Typical Section: Arterial Street

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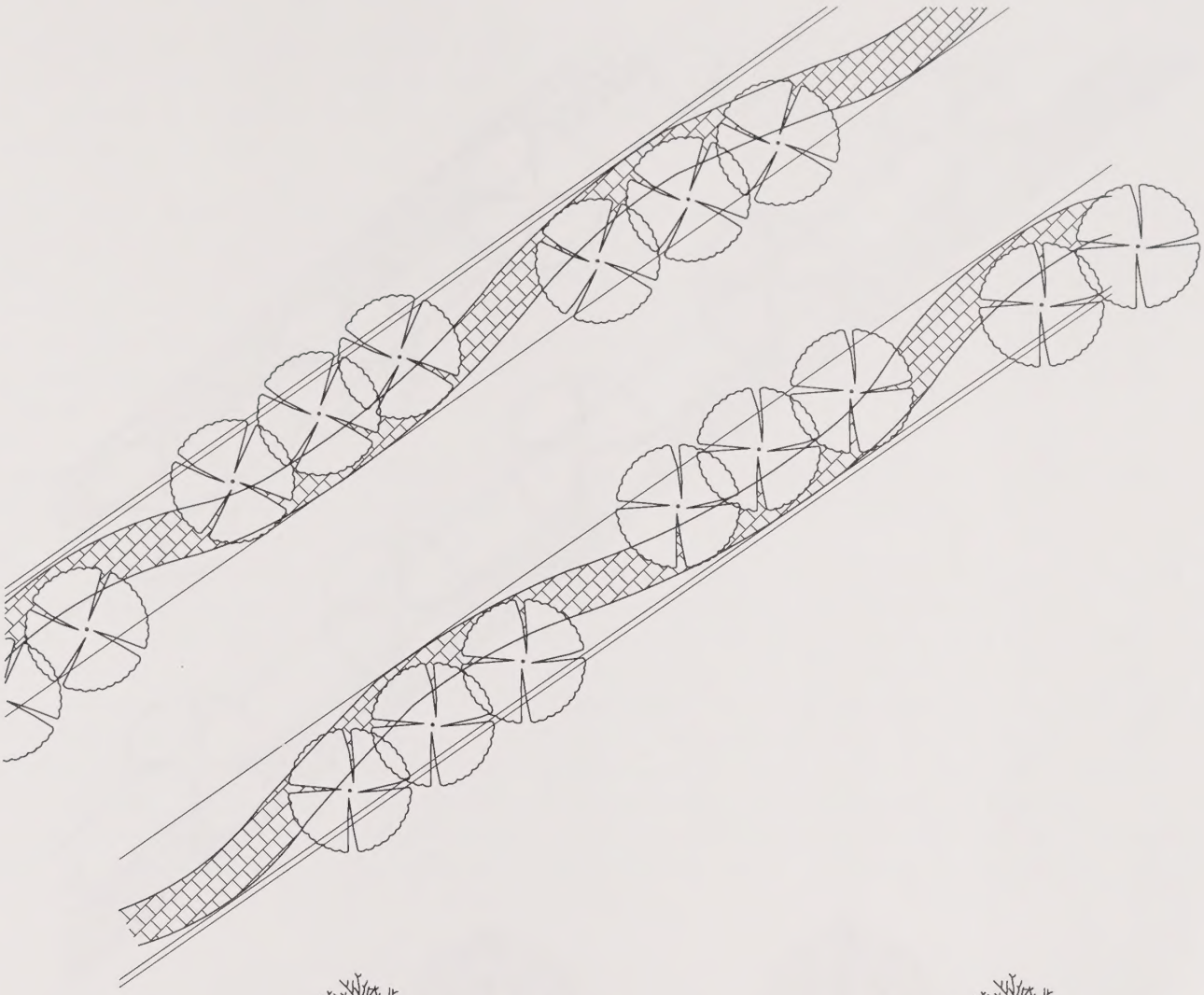

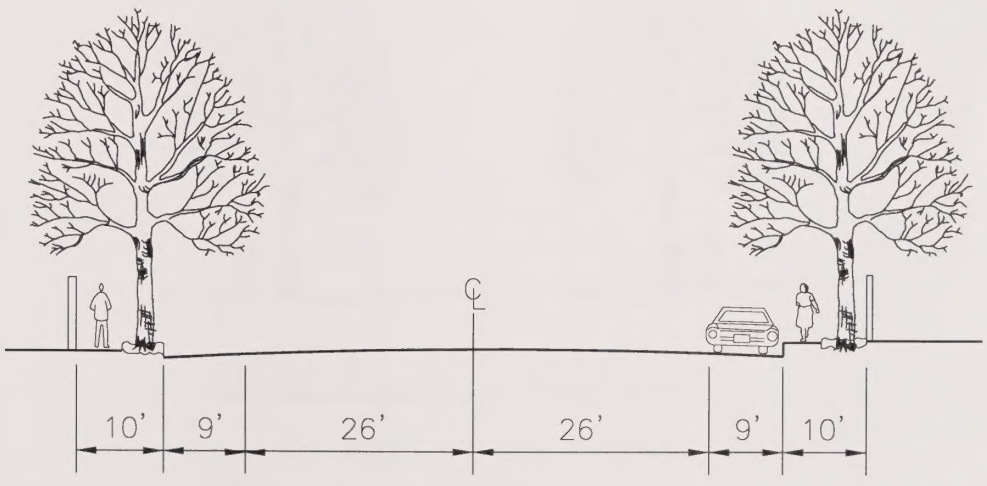

90' Right of Way 2 to 4 Lanes
N.T.S.

City of Wasco Circulation Element

Figure 4.1.3

Typical Section: Collector Street

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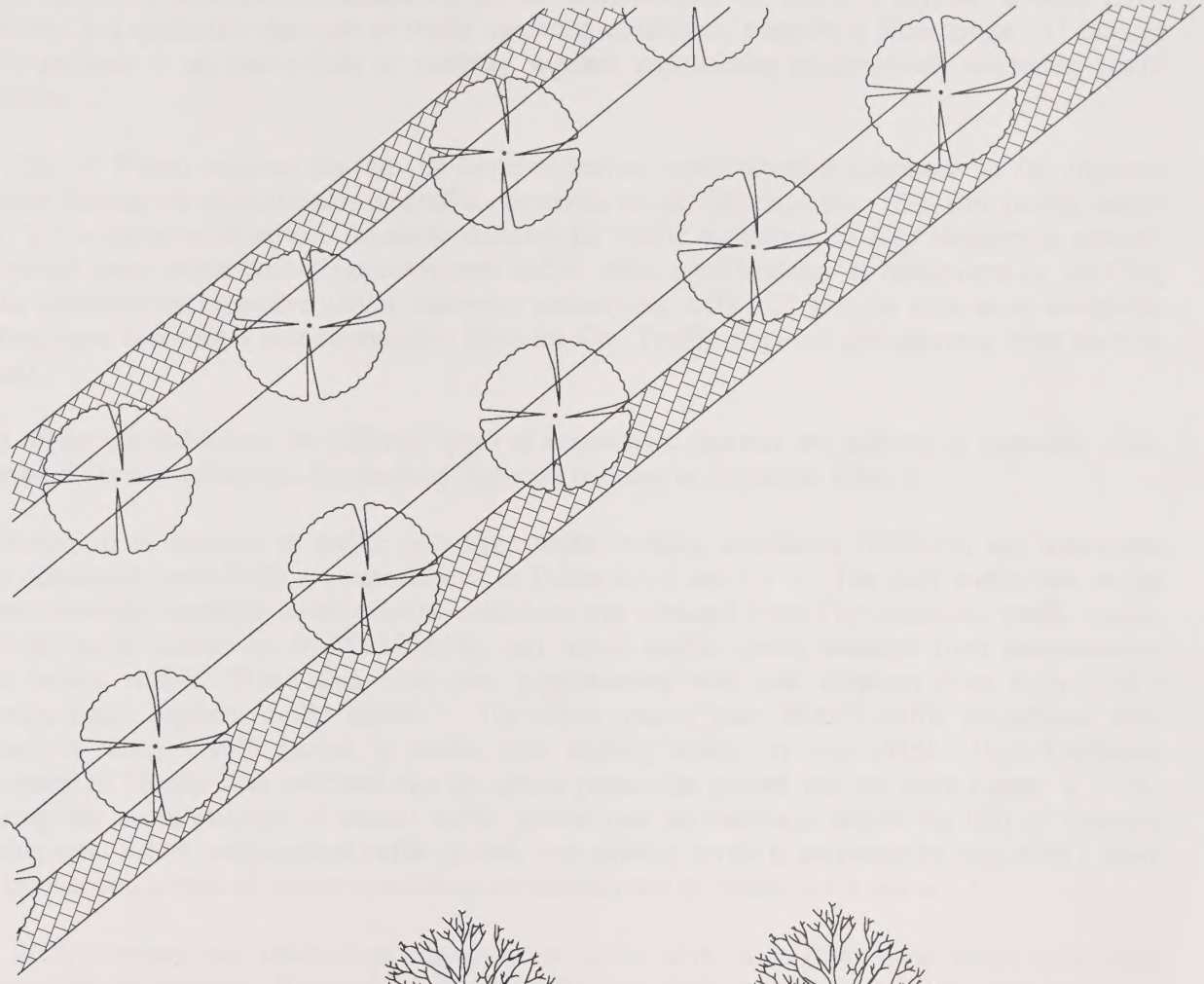
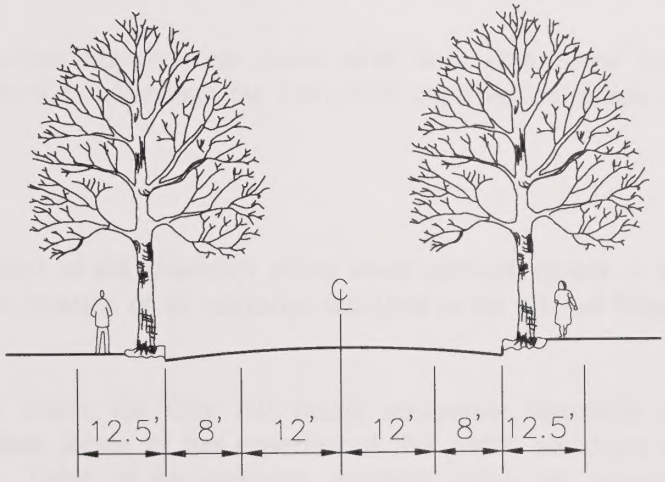




65' Right of Way 2 Lanes
N.T.S.

City of Wasco Circulation Element

Figure 4.1.4

Typical Section: Local Street

File: T304TG17.dwg(30mar00)25-4200-01

EXISTING AND ANTICIPATED FUTURE TRAFFIC OPERATIONS

Traffic operations have been quantified through the determination of "Level of Service" (LOS). Level of Service is a qualitative measure of traffic operating conditions, whereby a letter grade "A" through "F" is assigned to an intersection or roadway segment representing progressively worsening traffic conditions.

The City of Wasco requires the use of Level-of-Service methodologies presented in the *Highway Capacity Manual* for quantification of traffic operations on all City facilities. The City hereby adopts LOS "C" as the level-of-service threshold standard for traffic operations on City facilities in general. For special cases where cost of improvements and/or other considerations as determined by the City, will be prohibitively expensive and/or otherwise undesirable, LOS "D" may be used as an acceptable standard upon obtaining a recommendation from the City Traffic Engineer and approval from the City Council.

Level of Service definitions for different types of intersection controls are outlined in Appendix Table 1. Level of Service definitions for roadway types are outlined in Appendix Table 2.

The results of an analysis of traffic operations under existing conditions (1997-99) and anticipated future conditions (year 2020) are summarized in Tables 4.1.2 and 4.1.3. The daily traffic data on the different roadway segments under existing conditions was obtained from City-conducted traffic counts, peak-hour traffic counts by OMNI-MEANS, and recent traffic counts obtained from miscellaneous traffic impact studies. These data were also supplemented with data obtained from Kern COG's "Existing-Year" regional traffic model. The future year ("year 2020") traffic projections were obtained by using a 40% growth in traffic over existing levels, by year 2020. (*Note:* California Department of Finance data indicated that the annual population growth rate for Kern County is 1.7%. Applying this as an estimate of annual traffic growth rate on roadways within the City of Wasco's Planning area, a 40% compounded traffic growth over existing levels is estimated by year 2020.) Peak hour intersection Levels-of Service conditions are summarized in Tables 4.1.4 and 4.1.5.

Year 2020 roadway and intersection improvement needs have been determined based upon daily roadway capacity analyses. Figure 4.1.5 illustrates the Year 2020 improvement needs within the City's Planning Boundary.

B. ACCIDENTS

One of the most important indicators of the efficiency of the street network system is the frequency of accidents. Figure 4.1.6 shows the location of all vehicular accidents in the City of Wasco for the years 1996, 1997 and 1998.

Generally, traffic accident rates within the City fall within acceptable Statewide averages. The intersection of Poso Drive and State Route 43 has experienced five traffic accidents within the three year accident history reviewed. Three of the accidents occurred within the intersection, and two accidents occurred near the intersection. None of these five accidents involved fatalities.

TABLE 4.1.2
EXISTING ROADWAY LEVELS-OF-SERVICE

Roadway Segment Name	From	To	Roadway Classification	Existing AADT (1997-1999)	Existing Travel Lanes	Existing Daily Capacity	Existing V/C Ratio	Existing LOS
State Route 46	West City Limits	Scofield Avenue	State Highway/Arterial	4,500	2	12,000	0.38	A
State Route 46	Scofield Avenue	Western Avenue	State Highway/Arterial	5,950	2	12,000	0.50	A
State Route 46	Western Avenue	Magnolia Avenue	State Highway/Arterial	6,000	2	12,000	0.50	A
State Route 46	Magnolia Avenue	Central Avenue	State Highway/Arterial	6,100	2	12,000	0.51	A
State Route 46	Central Avenue	Palm Avenue	State Highway/Arterial	8,500	2	16,000	0.53	A
State Route 46	Palm Avenue	Griffith Street	State Highway/Arterial	10,600	2	16,000	0.66	B
State Route 46	Griffith Street	S.R.43 South (F St.)	State Highway/Arterial	9,900	2	16,000	0.62	B
State Route 46	S.R.43 South (F St.)	S.R.43 North (J St.)	State Highway/Arterial	6,800	2	12,000	0.57	A
State Route 46	S.R.43 North (J St.)	East City Limits	State Highway/Arterial	4,400	2	12,000	0.37	A
State Route 43 North	North City Limits	S.R.46	State Highway/Arterial	2,900	2	9,000	0.32	A
State Route 43 South (J St.)	S.R.46	7th Street	State Highway/Arterial	5,500	2	9,000	0.61	B
State Route 43 South (J St.)	7th Street	Poso Drive	State Highway/Arterial	4,900	2	12,000	0.41	A
State Route 43 South (F St.)	Poso Drive	Kimberlina Road	State Highway/Arterial	6,700	2	16,000	0.42	A
McCombs Avenue	West City Limits	Western Avenue	Arterial	350	2	9,000	0.04	A
McCombs Avenue	Western Avenue	Palm Avenue	Arterial	500	2	9,000	0.06	A
McCombs Avenue	Palm Avenue	S.R.43	Arterial	1,000	2	9,000	0.11	A
Scofield Avenue	McCombs Avenue	S.R.46	Arterial	600	2	9,000	0.07	A
Scofield Avenue	S.R.46	South City Limits	Arterial	1,100	2	9,000	0.12	A
Gromer Road	Leonard Avenue	Western Avenue	Collector Street	300	2	9,000	0.03	A
Gromer Road	Western Avenue	Magnolia Avenue	Collector Street	300	2	9,000	0.03	A
Gromer Road	Magnolia Avenue	Palm Avenue	Collector Street	300	2	9,000	0.03	A
Gromer Road	Palm Avenue	Annin Road	Collector Street	250	2	9,000	0.03	A
Western Avenue	McCombs Avenue	S.R.46	Arterial	500	2	9,000	0.06	A
Western Avenue	S.R.46	7th Street	Arterial	350	2	9,000	0.04	A
Western Avenue	7th Street	Poso Drive	Arterial	270	2	9,000	0.03	A
Western Avenue	Poso Drive	Filburn Street	Arterial	1,450	2	9,000	0.16	A
Western Avenue	Filburn Street	Jackson Street	Arterial	1,200	2	9,000	0.13	A
Magnolia Avenue	McCombs Avenue	S.R.46	Arterial	200	2	9,000	0.02	A
Magnolia Avenue	S.R.46	7th Street	Arterial	650	2	9,000	0.07	A
Magnolia Avenue	7th Street	Poso Drive	Arterial	500	2	9,000	0.06	A
Magnolia Avenue	Poso Drive	Filburn Street	Arterial	750	2	9,000	0.08	A
Magnolia Avenue	Filburn Street	Jackson Street	Arterial	800	2	9,000	0.09	A
Central Avenue	McCombs Avenue	S.R. 46	Arterial	n/a	n/a	n/a	n/a	n/a
Central Avenue	S.R.46	7th Street	Arterial	800	2	9,000	0.09	A
Central Avenue	7th Street	Poso Drive	Arterial	800	2	9,000	0.09	A
Central Avenue	Poso Drive	Filburn Street	Arterial	480	2	9,000	0.05	A
Central Avenue	Filburn Street	Jackson Street	Arterial	600	2	9,000	0.07	A
Beckes Street	S.R.46	7th Street	Collector Street	500	2	9,000	0.06	A
Beckes Street	7th Street	Poso Drive	Collector Street	500	2	9,000	0.06	A

TABLE 4.1.2
EXISTING ROADWAY LEVELS-OF-SERVICE

Roadway Segment Name	From	To	Roadway Classification	Existing AADT (1997-1999)	Existing Travel Lanes	Existing Daily Capacity	Existing V/C Ratio	Existing LOS
Palm Avenue	S.R.46	7th Street	Collector Street	1,500	2	14,500	0.10	A
Palm Avenue	7th Street	Poso Drive	Collector Street	1,700	2	14,500	0.12	A
Palm Avenue	Poso Drive	Filburn Street	Collector Street	1,850	2	14,500	0.13	A
Palm Avenue	Filburn Street	Jackson Street	Collector Street	1,700	2	9,000	0.19	A
Poplar Avenue	Poso Drive	Filburn Street	Collector Street	400	2	9,000	0.04	A
Griffith Street	Gromer Road	S.R.46	Local Street	1,200	2	9,000	0.13	A
Griffith Street	S.R.46	7th Street	Collector Street	2,800	2	9,000	0.31	A
Griffith Street	7th Street	Poso Drive	Collector Street	3,000	2	9,000	0.33	A
Griffith Street	Poso Drive	Filburn Street	Local Street	550	2	9,000	0.06	A
Griffith Street	Filburn Street	Jackson Street	Collector Street	550	2	9,000	0.06	A
Wasco Avenue	Poso Drive	Kimberlina Road	Collector Street	500	2	9,000	0.06	A
7th Street	S.R. 46	Western Avenue	Collector Street	n/a	n/a	n/a	n/a	n/a
7th Street	Western Avenue	Central Avenue	Collector Street	2,400	2	9,000	0.27	A
7th Street	Central Avenue	Palm Avenue	Collector Street	2,400	2	9,000	0.27	A
7th Street	Palm Avenue	Griffith Street	Collector Street	4,900	2	9,000	0.54	A
7th Street	Griffith Street	F St.	Collector Street	5,900	2	9,000	0.66	B
Poso Drive	Western Avenue	Magnolia Avenue	Collector Street	3,800	2	9,000	0.42	A
Poso Drive	Magnolia Avenue	Central Avenue	Collector Street	3,800	2	9,000	0.42	A
Poso Drive	Central Avenue	Palm Avenue	Collector Street	3,800	2	9,000	0.42	A
Poso Drive	Palm Avenue	Poplar Avenue	Collector Street	4,000	2	14,500	0.28	A
Poso Drive	Poplar Avenue	Griffith Street	Collector Street	5,400	2	14,500	0.37	A
Poso Drive	Griffith Street	S.R.43 (F St.)	Collector Street	3,800	2	14,500	0.26	A
Poso Drive	S.R.43 (F St.)	J Street	Collector Street	3,800	2	14,500	0.26	A
Filburn Street	Western Avenue	Magnolia Avenue	Arterial	1,500	2	9,000	0.17	A
Filburn Street	Magnolia Avenue	Central Avenue	Arterial	1,500	2	9,000	0.17	A
Filburn Street	Central Avenue	Palm Avenue	Arterial	3,000	2	9,000	0.33	A
Filburn Street	Palm Avenue	Poplar Avenue	Arterial	4,100	2	9,000	0.46	A
Filburn Street	Poplar Avenue	Griffith Street	Arterial	4,300	2	9,000	0.48	A
Filburn Street	Griffith Street	S.R.43 (F St.)	Arterial	4,400	2	9,000	0.49	A
Jackson Street	Western Avenue	Magnolia Avenue	Collector Street	1,500	2	9,000	0.17	A
Jackson Street	Magnolia Avenue	Central Avenue	Collector Street	1,500	2	9,000	0.17	A
Jackson Street	Central Avenue	Palm Avenue	Collector Street	2,500	2	9,000	0.28	A
Jackson Street	Palm Avenue	Griffith Street	Collector Street	2,500	2	9,000	0.28	A
Jackson Street	Griffith Street	S.R.43 (F St.)	Collector Street	3,000	2	9,000	0.33	A
Leonard Avenue	McCombs Avenue	S.R.46	Collector Street	700	2	9,000	0.08	A
Leonard Avenue	S.R. 46	Filburn Street	Collector Street	n/a	n/a	n/a	n/a	n/a
Leonard Avenue	Filburn Street	Jackson Street	Collector Street	n/a	n/a	n/a	n/a	n/a

TABLE 4.1.3
YEAR 2020 ROADWAY LEVELS-OF-SERVICE

Roadway Segment Name	From	To	Roadway Classification	Year 2020 AADT[1]	Year 2020 Travel Lanes	Year 2020 Daily Capacity	Year 2020 V/C Ratio	Year 2020 LOS
State Route 46	West City Limits	Scofield Avenue	State Highway/Arterial	6,300	4	32,500	0.19	A
State Route 46	Scofield Avenue	Western Avenue	State Highway/Arterial	8,330	4	32,500	0.26	A
State Route 46	Western Avenue	Magnolia Avenue	State Highway/Arterial	8,400	4	32,500	0.26	A
State Route 46	Magnolia Avenue	Central Avenue	State Highway/Arterial	8,540	4	32,500	0.26	A
State Route 46	Central Avenue	Palm Avenue	State Highway/Arterial	11,900	4	32,500	0.37	A
State Route 46	Palm Avenue	Griffith Street	State Highway/Arterial	14,840	4	32,500	0.46	A
State Route 46	Griffith Street	S.R.43 South (F St.)	State Highway/Arterial	13,860	4	32,500	0.43	A
State Route 46	S.R.43 South (F St.)	S.R.43 North (J St.)	State Highway/Arterial	9,520	4	32,500	0.29	A
State Route 46	S.R.43 North (J St.)	East City Limits	State Highway/Arterial	6,160	4	32,500	0.19	A
State Route 43 North	North City Limits	S.R.46	State Highway/Arterial	4,063	4	29,000	0.14	A
State Route 43 South (J St.)	S.R.46	7th Street	State Highway/Arterial	7,705	4	29,000	0.27	A
State Route 43 South (J St.)	7th Street	Poso Drive	State Highway/Arterial	6,865	4	29,000	0.24	A
State Route 43 South (F St.)	Poso Drive	Kimberlina Road	State Highway/Arterial	9,386	4	29,000	0.32	A
McCombs Avenue	West City Limits	Western Avenue	Arterial	490	4	29,000	0.02	A
McCombs Avenue	Western Avenue	Palm Avenue	Arterial	700	4	29,000	0.02	A
McCombs Avenue	Palm Avenue	S.R.43	Arterial	1,401	4	29,000	0.05	A
Scofield Avenue	McCombs Avenue	S.R.46	Arterial	841	4	29,000	0.03	A
Scofield Avenue	S.R.46	South City Limits	Arterial	1,541	4	29,000	0.05	A
Gromer Road	Leonard Avenue	Western Avenue	Collector Street	420	2	14,500	0.03	A
Gromer Road	Western Avenue	Magnolia Avenue	Collector Street	420	2	14,500	0.03	A
Gromer Road	Magnolia Avenue	Palm Avenue	Collector Street	420	2	14,500	0.03	A
Gromer Road	Palm Avenue	Annin Road	Collector Street	350	2	14,500	0.02	A
Western Avenue	McCombs Avenue	S.R.46	Arterial	700	4	29,000	0.02	A
Western Avenue	S.R.46	7th Street	Arterial	490	4	29,000	0.02	A
Western Avenue	7th Street	Poso Drive	Arterial	378	4	29,000	0.01	A
Western Avenue	Poso Drive	Filburn Street	Arterial	2,031	4	29,000	0.07	A
Western Avenue	Filburn Street	Jackson Street	Arterial	1,681	4	29,000	0.06	A
Magnolia Avenue	McCombs Avenue	S.R.46	Arterial	280	4	29,000	0.01	A
Magnolia Avenue	S.R.46	7th Street	Arterial	911	4	29,000	0.03	A
Magnolia Avenue	7th Street	Poso Drive	Arterial	700	4	29,000	0.02	A
Magnolia Avenue	Poso Drive	Filburn Street	Arterial	1,051	4	29,000	0.04	A
Magnolia Avenue	Filburn Street	Jackson Street	Arterial	1,121	4	29,000	0.04	A
Central Avenue	McCombs Avenue	S.R. 46	Arterial	1,000	4	29,000	0.03	A
Central Avenue	S.R.46	7th Street	Arterial	1,445	4	29,000	0.05	A
Central Avenue	7th Street	Poso Drive	Arterial	1,445	4	29,000	0.05	A
Central Avenue	Poso Drive	Filburn Street	Arterial	867	4	29,000	0.03	A
Central Avenue	Filburn Street	Jackson Street	Arterial	1,084	4	29,000	0.04	A
Beckes Street	S.R.46	7th Street	Collector Street	700	2	9,000	0.08	A
Beckes Street	7th Street	Poso Drive	Collector Street	700	2	9,000	0.08	A
Palm Avenue	McCombs Avenue	S.R.46	Arterial	452	4	29,000	0.02	A

TABLE 4.1.3
YEAR 2020 ROADWAY LEVELS-OF-SERVICE

Roadway Segment Name	From	To	Roadway Classification	Year 2020 AADT[1]	Year 2020 Travel Lanes	Year 2020 Daily Capacity	Year 2020 V/C Ratio	Year 2020 LOS
Palm Avenue	7th Street	Poso Drive	Collector Street	3,070	2	14,500	0.21	A
Palm Avenue	Poso Drive	Filburn Street	Collector Street	3,341	2	14,500	0.23	A
Palm Avenue	Filburn Street	Jackson Street	Collector Street	3,070	2	14,500	0.21	A
Poplar Avenue	Poso Drive	Filburn Street	Collector Street	560	2	9,000	0.06	A
Griffith Street	Gromer Road	S.R.46	Local Street	2,167	2	9,000	0.24	A
Griffith Street	S.R.46	7th Street	Collector Street	5,057	2	9,000	0.56	A
Griffith Street	7th Street	Poso Drive	Collector Street	5,418	2	9,000	0.60	B
Griffith Street	Poso Drive	Filburn Street	Local Street	993	2	9,000	0.11	A
Griffith Street	Filburn Street	Jackson Street	Collector Street	993	2	9,000	0.11	A
Wasco Avenue	Poso Drive	Kimberlina Road	Collector Street	700	2	9,000	0.08	A
7th Street	S.R. 46	Western Avenue	Collector Street	3,500	2	14,500	0.24	A
7th Street	Western Avenue	Central Avenue	Collector Street	4,335	2	9,000	0.48	A
7th Street	Central Avenue	Palm Avenue	Collector Street	4,335	2	9,000	0.48	A
7th Street	Palm Avenue	Griffith Street	Collector Street	8,850	2	9,000	0.98	E
7th Street	Griffith Street	F St.	Collector Street	10,656	2	9,000	1.18	F
Poso Drive	Western Avenue	Magnolia Avenue	Collector Street	6,863	2	9,000	0.76	C
Poso Drive	Magnolia Avenue	Central Avenue	Collector Street	6,863	2	9,000	0.76	C
Poso Drive	Central Avenue	Palm Avenue	Collector Street	6,863	2	9,000	0.76	C
Poso Drive	Palm Avenue	Poplar Avenue	Collector Street	7,224	2	14,500	0.50	A
Poso Drive	Poplar Avenue	Griffith Street	Collector Street	9,753	2	14,500	0.67	B
Poso Drive	Griffith Street	S.R.43 (F St.)	Collector Street	6,863	2	14,500	0.47	A
Poso Drive	S.R.43 (F St.)	J Street	Collector Street	6,863	2	14,500	0.47	A
Filburn Street	Western Avenue	Magnolia Avenue	Arterial	2,709	4	29,000	0.09	A
Filburn Street	Magnolia Avenue	Central Avenue	Arterial	2,709	4	29,000	0.09	A
Filburn Street	Central Avenue	Palm Avenue	Arterial	5,418	4	29,000	0.19	A
Filburn Street	Palm Avenue	Poplar Avenue	Arterial	7,405	4	29,000	0.26	A
Filburn Street	Poplar Avenue	Griffith Street	Arterial	7,766	4	29,000	0.27	A
Filburn Street	Griffith Street	S.R.43 (F St.)	Arterial	7,947	4	29,000	0.27	A
Jackson Street	Western Avenue	Magnolia Avenue	Collector Street	2,101	2	14,500	0.14	A
Jackson Street	Magnolia Avenue	Central Avenue	Collector Street	2,101	2	14,500	0.14	A
Jackson Street	Central Avenue	Palm Avenue	Collector Street	3,502	2	14,500	0.24	A
Jackson Street	Palm Avenue	Griffith Street	Collector Street	3,502	2	14,500	0.24	A
Jackson Street	Griffith Street	S.R.43 (F St.)	Collector Street	4,203	2	14,500	0.29	A
Leonard Avenue	McCombs Avenue	S.R.46	Collector Street	981	2	9,000	0.11	A
Leonard Avenue	S.R. 46	Filburn Street	Collector Street	1,000	2	14,500	0.07	A
Leonard Avenue	Filburn Street	Jackson Street	Collector Street	1,000	2	14,500	0.07	A

1. Based upon California Department of Finance data, 1.7% annual population growth for Kern County, KernCOG Year 2020 Traffic Model projections, and adjustments for expected 20 Year growth patterns.

TABLE 4.1.4
EXISTING CONDITIONS: INTERSECTION TRAFFIC OPERATIONS

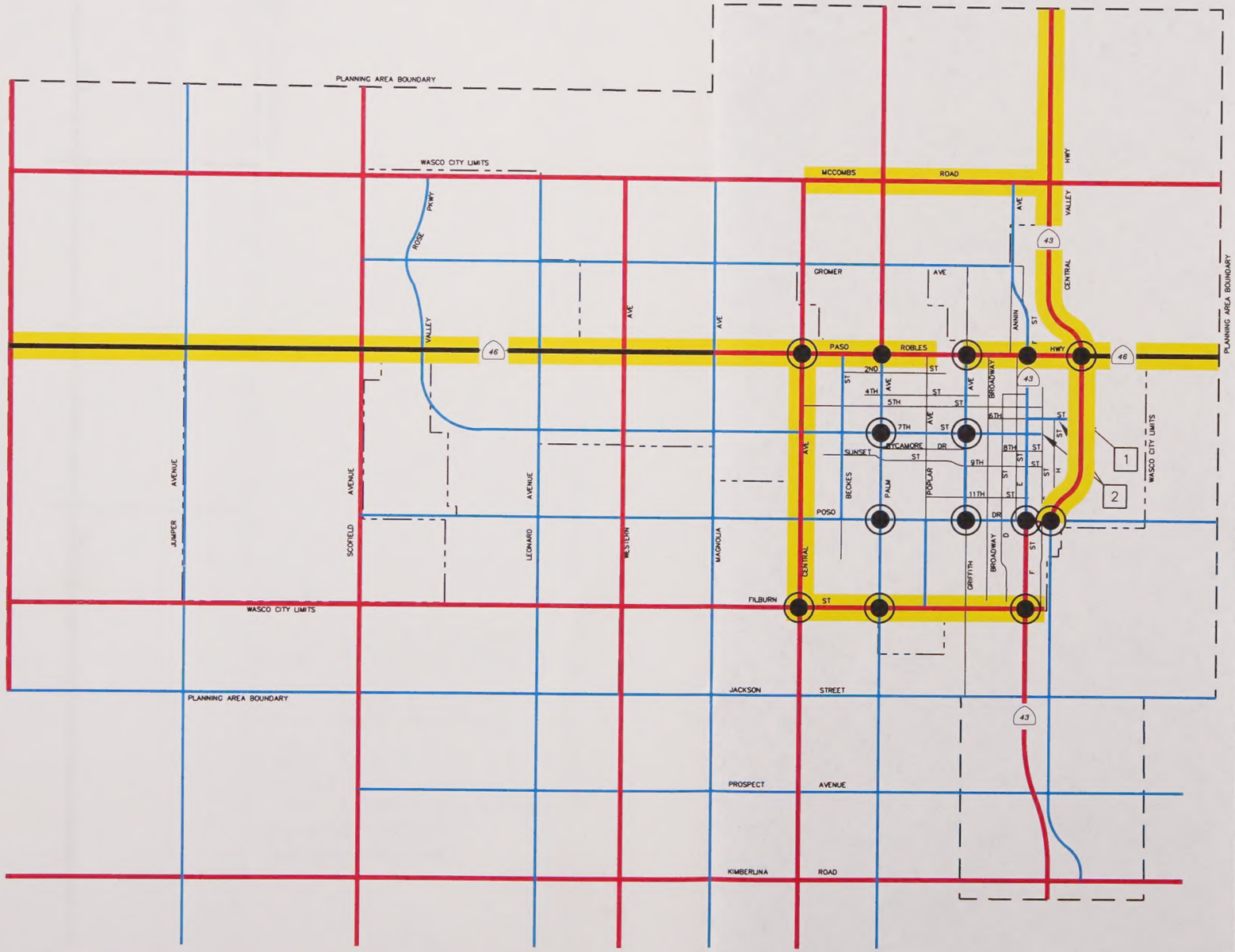
#	Intersection	Control Type	AM Peak Hour			PM Peak Hour		
			Average Delay (Sec/Veh)	LOS	Pk Hr Warrant Met?	Average Delay (Sec/Veh)	LOS	Pk Hr Warrant Met?
1	State Route 46/Scofield Avenue	TWSC	13.7	B	No	14.5	B	No
2	State Route 46/Leonard Avenue	TWSC	10.4	B	No	12.7	B	No
3	State Route 46/Western Avenue	TWSC	11.6	B	No	14.8	B	No
4	State Route 46/Magnolia Avenue	TWSC	11.8	B	No	14.3	B	No
5	State Route 46/Central Avenue	TWSC	9.9	A	No	11.6	B	No
6	State Route 46/Palm Avenue	Signal	12.8	B	-	12.1	B	-
7	State Route 46/Poplar Avenue	TWSC	13.8	B	No	15.4	C	No
8	State Route 46/Griffith Street	TWSC	13.7	B	No	35.0	E	Yes
9	State Route 46/Annin Road	TWSC	11.7	B	No	19.4	C	No
10	State Route 46/S.R.43 (F Street)	Signal	13.5	B	-	15.6	B	-
11	State Route 46/S.R.43 (J Street)	TWSC	14.0	B	No	16.7	C	No
12	7th Street/Griffith Avenue	AWSC	11.8	B	No	11.5	B	No
13	Poso Drive/Griffith Avenue	AWSC	12.2	B	No	12.4	B	No
14	Poso Drive/Palm Avenue	AWSC	10.1	B	No	10.9	B	No
15	7th Street/Palm Avenue	AWSC	10.4	B	No	10.2	B	No

Legend:
TWSC = *Two-Way-Stop Control;* *AWSC* = *All-Way-Stop Control.*
Average Delay = *Average Intersection Delay for Signalized and AWSC Intersections.*
Average Delay = *Worst-Case Intersection Movement's Average Delay for TWSC Intersections.*
LOS = *Average Intersection Level of Service for Signalized and AWSC Intersections.*
LOS = *Worst-Case Movement's Level of Service for TWSC Intersections.*
Warrant = *Caltrans Peak-Hour-Volume Warrant-11 (Rural Areas).*

TABLE 4.1.5
YEAR 2020 CONDITIONS: INTERSECTION TRAFFIC OPERATIONS
(CONDITIONS WITH EXISTING LANE GEOMETRICS)

#	Intersection	Control Type	AM Peak Hour			PM Peak Hour		
			Average Delay (Sec/Veh)	LOS	Pk Hr Warrant Met?	Average Delay (Sec/Veh)	LOS	Pk Hr Warrant Met?
1	State Route 46/Scofield Avenue	TWSC	22.6	C	No	26.4	D	No
2	State Route 46/Leonard Avenue	TWSC	12.0	B	No	19.3	C	No
3	State Route 46/Western Avenue	TWSC	14.3	B	No	23.3	C	No
4	State Route 46/Magnolia Avenue	TWSC	15.4	C	No	21.5	C	No
5	State Route 46/Central Avenue	TWSC	13.6	B	No	23.8	C	No
6	State Route 46/Palm Avenue	Signal	13.1	B	-	13.0	B	-
7	State Route 46/Poplar Avenue	TWSC	15.9	C	No	28.6	D	No
8	State Route 46/Griffith Street	TWSC	22.7	C	No	171.8	F	Yes
9	State Route 46/Annin Road	TWSC	15.6	C	No	106.1	F	Yes
10	State Route 46/S.R.43 (F Street)	Signal	14.0	B	-	16.8	B	-
11	State Route 46/S.R.43 (J Street)	TWSC	21.1	C	No	36.5	E	Yes
12	7th Street/Griffith Avenue	AWSC	21.2	C	No	28.2	D	Yes
13	Poso Drive/Griffith Avenue	AWSC	15.9	C	No	29.9	D	Yes
14	Poso Drive/Palm Avenue	AWSC	15.2	B	No	15.2	D	Yes
15	7th Street/Palm Avenue	AWSC	20.9	C	No	20.9	D	Yes

Legend: *TWSC* = *Two-Way-Stop Control;* *AWSC* = *All-Way-Stop Control.*
Average Delay = *Average Intersection Delay for Signalized and AWSC Intersections.*
Average Delay = *Worst-Case Intersection Movement's Average Delay for TWSC Intersections.*
LOS = *Average Intersection Level of Service for Signalized and AWSC Intersections.*
LOS = *Worst-Case Movement's Level of Service for TWSC Intersections.*
Warrant = *Caltrans Peak-Hour-Volume Warrant-11 (Rural Areas).*



LEGEND

- State Highway
- Arterial Street
- Collector Street
- Local Street
- Signalized Intesections
- Widen Roadway to Ultimate Width
- Install New Traffic Signal
- 1 Upgrade AMTRAK Transit Station
- 2 Improve Pedestrian Facilities

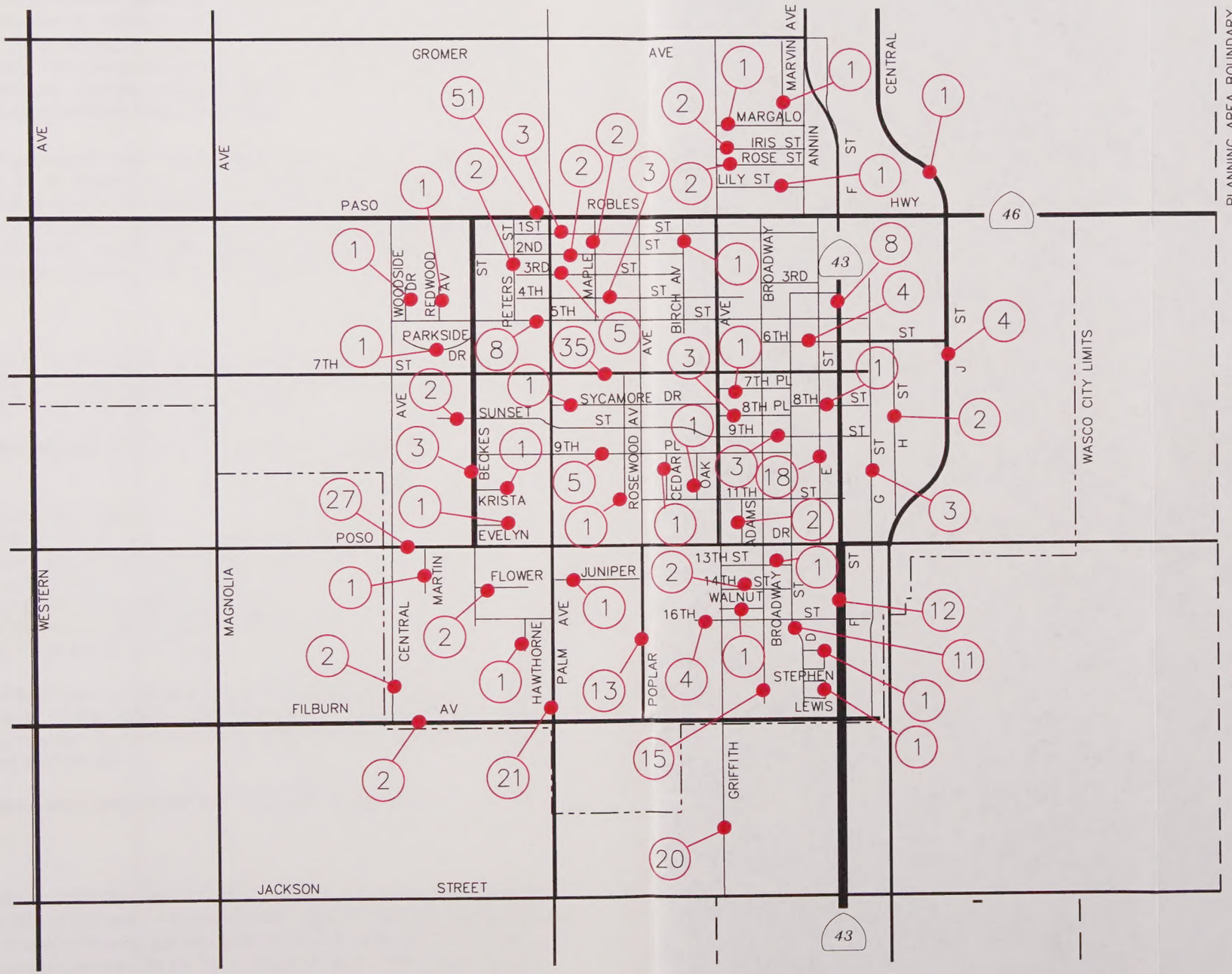
N.T.S.

Figure 4.1.5

City of Wasco Circulation Element

Year 2020 Roadway Improvement Needs

T.304TG07.DWG (05MAY00) 25-420-01



LEGEND

(11) Total Number of Accidents Per SWITRS Data 1996–1998

● "Primary Street" on which Accident Was Reported

NOTE: The number of accidents indicated on a "Primary Street" location represents the total number of accidents reported on all segments of the street.

N.T.S.

Figure 4.1.6

City of Wasco Circulation Element

Traffic Accidents 1996, 1997, 1998

T304TG18.DWG (15JUN2000) 25-4200-01

C. VEHICULAR PARKING

Parking is accommodated by off-street spaces provided by commercial, residential and industrial businesses. Public parking is provided by on-street spaces and at several municipal parking lots strategically located at the rear of the businesses along the 7th Street Corridor (refer to: Historic Downtown Wasco Overlay District). The demand for parking for specific businesses is dependent on the traffic generated by each land use, including seasonal variations in land use activity, and is regulated by the City of Wasco Zoning Ordinance Parking Regulations.

There is an identified need for the parking of owner operated tractor-trailers. Currently these vehicles are being parked throughout the City in residential, as well as commercial and industrial areas. At several locations, the illegal parking of large trucks causes safety hazards to both pedestrians and motor vehicles, and aesthetic nuisances to residential neighborhoods. The City should implement a program to encourage private businesses to provide off-street large vehicle parking areas and work to eliminate all on-street commercial vehicle parking with the exception of the Historic District.

D. TRUCK ROUTES

Designated trucking routes should be used by commercial tractor-trailers at all times unless a delivery at a local destination not on a designated Truck Route (See City of Wasco Municipal Code). The City of Wasco Police Services shall enforce such Ordinances and regulations.

The following roads within the Wasco Sphere of Influence are designated as Truck Routes:

1. **Highway 46**
2. **Highway 43** - south of Poso Drive
3. **North Highway 43**
4. **Poso Drive** - between J Street and Palm Avenue
5. **Palm Avenue** - south of Poso
6. **J Street** – between Poso Drive and Highway 46
7. **McCombs Road** - between Western Avenue and Highway 43
8. **Western Avenue** - south of McCombs Road

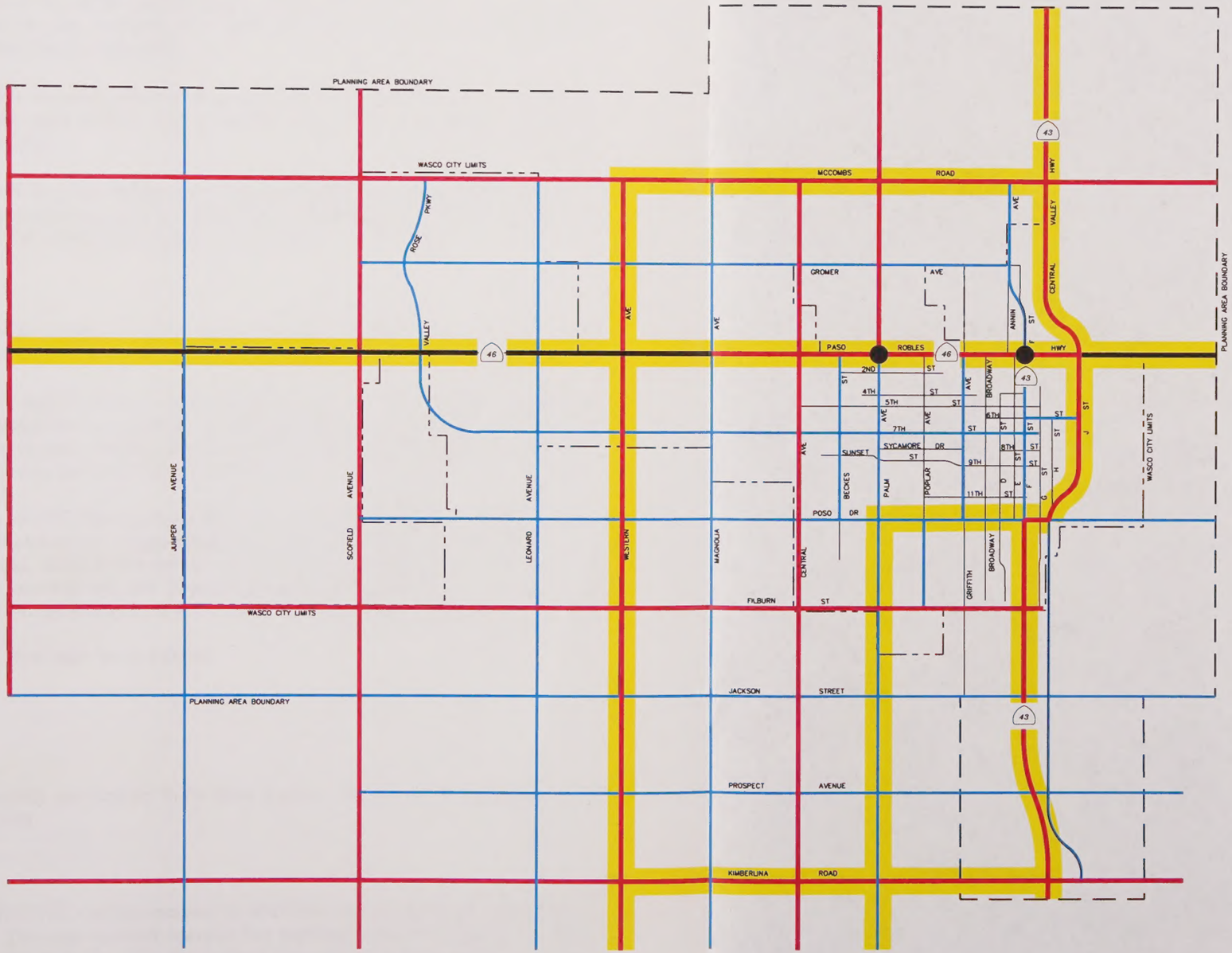
Kern County Master Circulation Plan includes a six-lane, limited access freeway between Highway 99 and Interstate 5, to be designated as a Truck Route. The County circulation plan also indicates that State Highway 43 will eventually become a full access freeway. The existing Truck Route on State Route 43 may need to be reviewed and relocated.

Figure 4.1.7 illustrates the designated truck routes within the Wasco Sphere of Influence.

4.2 MASS TRANSIT

Because of the geographical conditions of the San Joaquin Valley, people in some areas of Kern County breathe unhealthful air on some days of the year. Particulate matter (dust) is especially prevalent in agricultural areas of the county (including Wasco), and the drought conditions of the early 1990's have only made particulate matter a greater concern. In the more congested areas of the county (mainly Bakersfield), ozone peak levels exceed State standards on several days per year. Since 1987, Kern

County has made significant improvement in improving the overall air quality despite growth and drought conditions. Tough standards on vehicle emissions, stricter regulations on pollutants and increased mass transportation have played an important rule in reducing ambient air quality.



N.T.S.

Figure 4.1.7

City of Wasco Circulation Element

Designated Truck Routes

T304TG09.DWG (05MAY00) 25-420-01

Because mass transportation is most efficient and cost effective between relatively dense nodes of population, a fixed route mass transit system for the City of Wasco would not be appropriate at this time. The City's density is relatively uniform, and commercial clusters are just beginning to appear; however, several factors may increase the future potential of fixed mass-transit for Wasco:

1. Significant new regulations on air quality, traffic mitigation, impact/user fees, etc. added to private use transport may make fixed-route public transportation more attractive, cost effective and viable.

2. Implementation of medium density nodes centered on residential and commercial land uses will make more efficient use of land and increase the plausibility of fixed mass transit for the City.

3. Fixed demands, i.e., The Valley Rose Seniors community, may have a high demand for public transportation to and from certain fixed commercial locations. Fixed stops in this instance may be more efficient and cost effective

A. DIAL-A-RIDE

The City of Wasco Dial-a-Ride system is demand-oriented without scheduled or fixed stops. It is operated on a first-come-first-serve basis.

An analysis of the number of mobility-limited persons in the Wasco area shows that between ten and fifteen percent of Wasco's population is considered mobility limited. This figure includes only those who are either physically or mentally disabled, but not those who are financially disabled. CSO and elderly clients comprise the greater portion of Dial-a-Ride ridership.

Recent development within the City has increased the demand for the Dial-a-Ride services. Peak operating days see over 200 passengers. Approximately 70% of these services involve either Senior Citizens, and/or medical needs. Employment oriented commute trips represent approximately 10% of the ridership. The system currently has two 20-passenger buses, equipped with wheel chair lifts. Service is provided Monday through Friday from 8:00 AM to 5:00 PM, with two full time drivers.

Passenger totals for the past three years are as follows:

1997 - 24,195
1998 - 26,161
1999 - 25,861

Inter-city bus service is currently provided by North Kern Express. Buses pick-up and depart at the Amtrak Station three times daily.

B. AMTRAK

The San Joaquin route of AMTRAK is jointly operated by AMTRAK and the California Department of Transportation (CalTrans). The route currently operates four regularly scheduled stops per day at the Wasco station (also see Terminals 4.11). The San Joaquin line operates between Bakersfield to the

south, and Fresno, the San Francisco Bay area and Sacramento to the north. At each stop along the line feeder transportation systems allow additional mass transport throughout the individual communities (such as the dial-a-ride system in Wasco, and BART in the Bay area).

Within the next ten years (1992-2002), AMTRAK, in conjunction with CalTrans, hopes to begin construction on a Bakersfield to Los Angeles rail line. This final link would facilitate high speed rail between northern and southern California. Currently, regularly scheduled AMTRAK bus service is available between Bakersfield and Los Angeles. As a result of AMTRAK's service to Wasco, the City is well linked with not only major destinations in California, but across the United States as well.

The existing AMTRAK station, located at the east end of 7th Street, should be upgraded to create a highly efficient multi-modal facility. The Multi-Modal Transit Station should provide coordinated services between AMTRAK, Dial-a-Ride, North Kern Regional Transit, and future inter-regional bus services (to be provided by other commercial carriers). Pedestrian access to/from the Multi-Modal Transit Station should be improved to provide safe and efficient pedestrian access to/from the west side of the City.

C. OTHER

The Wasco Parks and Recreation District also operates a vehicle for the senior citizens lunch program. The vehicle is also utilized by about 15 passengers per day for other senior citizens' and recreational programs. Regular bussing service is also available to the Delano Regional Medical Facility by phoning the Delano Medical Facility.

4.3 FREIGHT RAILROAD

The Burlington Northern & Santa Fe Railroad Company operates a rail line located on the East side of the City. The track is utilized for the transportation of freight and passenger service and it is possible to locate additional rail spurs in the industrial-zoned eastern sector of the City and within the Wasco Industrial Park. Wasco is also a regularly scheduled stop for the delivery of coal to the technologically advanced Savage Coal Transfer Facility.

4.4 PEDESTRIAN FACILITIES

Pedestrian traffic is provided for by a system of sidewalks abutting the streets. The sidewalks are protected by barrier-type concrete curbs and gutters. Curb and gutter is over 99 percent completed. However, sidewalks are only partially completed, resulting in potential safety hazards and inconvenience for pedestrians. There are two basic sidewalk designs in the City of Wasco: 1) Sidewalk adjacent to the Street; and 2) Sidewalk and Street separated by landscaped median. The sidewalk adjacent to the street should be used along all heavily traveled streets such as collector and arterials The sidewalk with a landscaped median should be used in residential areas, along local streets to separate vehicles and pedestrian effectively.

In order to complete the City's sidewalk system, the City will continue to pursue funding sources such as TDA Article 3, along with other transportation and urban enhancement grants. Pedestrian facilities should be coordinated to provide safe access to the Multi-Modal Transit Station on the east side of the City.

4.5 BICYLE FACILITIES

The bicycle transportation system is provided by the total street system and an extensive and comprehensive Belt Park bicycle path system (see 14.0 Belt Park). The Belt Park system circumnavigates the entire City and provides safe and aesthetic trails for cycling, jogging, skating or walking. Belt Park users will infrequently interact with motor vehicle users, as the primary concept behind the park is to separate the vehicular and pedestrian modes of travel. As the City of Wasco continues to grow, it is apparent that bicycle transportation accommodations will need to grow proportionally.

Belt Park Bicycle trails will also serve as pedestrian links between parks, open spaces, civic spaces, and other pedestrian oriented spaces. A Master Plan for the City's Belt Park and Bicycle Trail System is shown in Figure 4.5.1. Along with the City's dial-a-ride system which encompasses the entire City, bicycle trails will offer a clean-air choice of transportation to propel Wasco into the 21st Century.

4.6 AIRPORTS

Kern County operates County Airport No. 5 one mile north of the State Highway 46/Palm Avenue intersection. The airport provides limited general aviation and agricultural aircraft support facilities. The nearest commercial passenger airport is Meadows Field (BFL) in Bakersfield. Figure 4.6.1 illustrates the City of Wasco Airport flight path approach district.

The Wasco Airport is a strong asset to future industrial growth in the City. Industrial/manufacturing and storage/distribution facilities may eventually be constructed on land adjacent to or in close proximity to the runways. All airport overlay designations shall be addressed as development occurs.

Meadows Field, designated as a "non-hub," provides 32 flights per day to both interstate and intrastate destinations. Regularly scheduled commuter flights include Los Angeles, San Francisco, Sacramento, Phoenix, Las Vegas. Meadows Field is expected to expand their facilities between 7 and 10 years from now, and a Senior Administrative officer at the Airport said that they are always looking to expand their routes in and out of Bakersfield. Routes will most likely expand in 7 to 10 years with additional growth in the metropolitan Bakersfield area and a larger, more accommodating terminal facility.

A new airport would most likely remain at the existing location; however, a new terminal would probably be located to the north of the existing control tower. This would make Meadows Field Airport slightly closer to Wasco and more accessible to passenger air travel.

4.7 PIPELINES AND CONDUITS

Electric Utility Service is provided to the City, as well as the adjacent areas by Pacific Gas and Electric Company (PG&E). PG&E has not quantitatively defined the present capacity or capacity utilization of their electrical generation, transmission and distribution system in Wasco, but will adapt and expand the system for growth as necessary. Currently, a 70-KV transmission line runs in an east-west direction along State Highway 46 through the City and the City Industrial Park. To the west 3 1/2 miles, there is a major transmission line of 115-KV capacity and to the northeast of the City limits there is an electrical substation of 70-KV capacity.

MCCOMBS ROAD

GROMER AVE.

LEONARD AVE.

GRIFFITH AVE.

ROUTE 46

SCOFIELD AVE

7th ST.

MAGNOLIA AVE.

BECKES ST.

H ST.

J ST.

POSO DRIVE

CENTRAL AVE.

POPLAR AVE.

FILBURN ST.

PALM AVE.

N

BIKE TRAIL SYSTEM

BIKE TRAILS

- Class I
- Class II

ROADWAYS

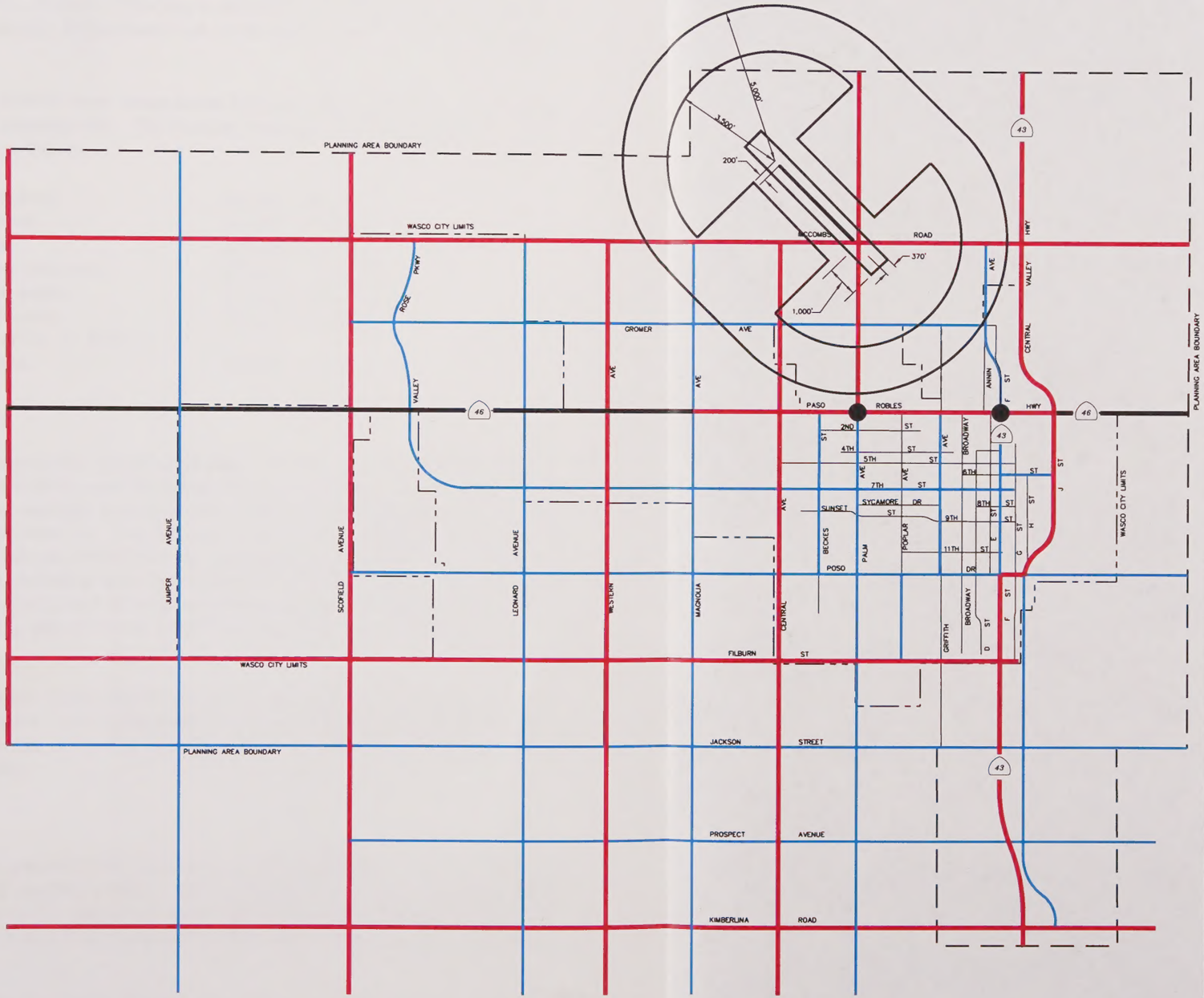
- Highway
- Arterial
- Collector
- Local

N.T.S.
Figure 4.5.1

City of Wasco Circulation Element

Bike Trail System

G304003.APR / Bike Path



N.T.S.

Figure 4.6.1

City of Wasco Circulation Element

Airport Approach District

T304TG011.DWG (05MAY00) 25-420-01

Natural Gas is provided to the City by Southern California Gas Company (The Gas Company). The major natural gas transmission line in the City is an eight-inch, high pressure (230 PSI) main line running north and south along Palm Avenue. This line is identified as Southern California Gas Co. transmission line No. 205. Expansion, improvement and reinforcement plans of the gas system are made on an "as needed" basis.

Several Shafter-Wasco Irrigation District water transmission lines pass through the City. These lines are for irrigation and agricultural purposes only. The location, maximum size and capacity (cubic feet per second, cfs) of these lines are as follows:

a.	Filburn Street (east-west)	60 inch – 87.8 cfs
b.	Poso Drive (east-west)	21 inch – 12.2 cfs
c.	7th Street (east-west)	24 inch – 17.1 cfs
d.	1320 ft. north of 46 (east-west)	27 inch – 8.5 cfs
e.	Palm Avenue(north-south)	51 inch – 66.6 cfs
f.	Annin Road (north-south)	15 inch – 3.0 cfs
g.	Mid Section Line of Sec. 7, T 26 S., R 25 E., M.D.B.&M.	15 inch - 3.0 cfs

4.8 STORM DRAINAGE

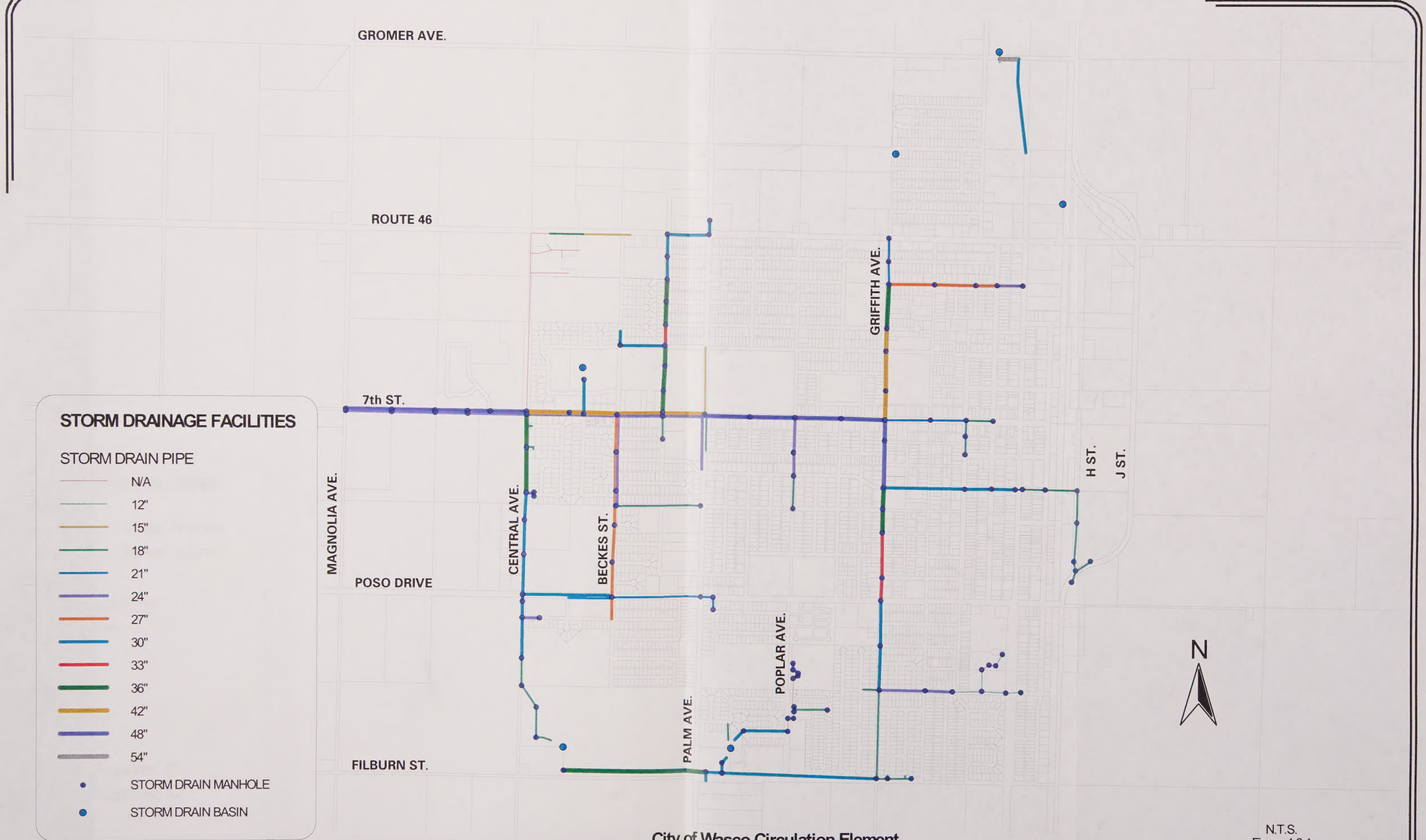
The City operates the storm drainage system for the community. In 1983, the City developed a Storm Drainage Master Plan (Strauss and Roberts), and this Master Plan has been revised and updated herein. Most of the City utilizes a surface drainage system (gutter) which is directed into subsurface storm drain lines at key points throughout the City. The drainage system basically flows from east to west along 7th Street, to holding ponds adjacent to the Sewerage Treatment Facility. There is an emergency holding pond at Westside Park which doubles as a City recreational open space, and additional holding ponds should be designed in a similar manner in order to maximize their use to the community. Key storm drain lines are located along Beckes Street, Central Avenue, Poso Drive, Filburn Street and Seventh Street.

Additional storm drain lines need to be constructed in order to accommodate growth in the outer fringes of the existing City limits. In addition, new holding ponds for storm drainage waters such as Westside Park need to be constructed as the City grows and expands. Figure 4.8.1 illustrates the Master Storm Drainage Plan for the City of Wasco.

4.9 WATER

The water system for the City is operated by the City Public Works Department. The City currently operates several water wells and supplies domestic water consumption. Local per capita water consumption is slightly in excess of 250 gallons per day. The Public Works Department does not foresee any significant problems in continuing to supply adequate levels of domestic water service to the Planning Area.

The major trunk lines are 8" in diameter and are located under most arterial and collector street right-of-way as shown in Figure 4.9.1.

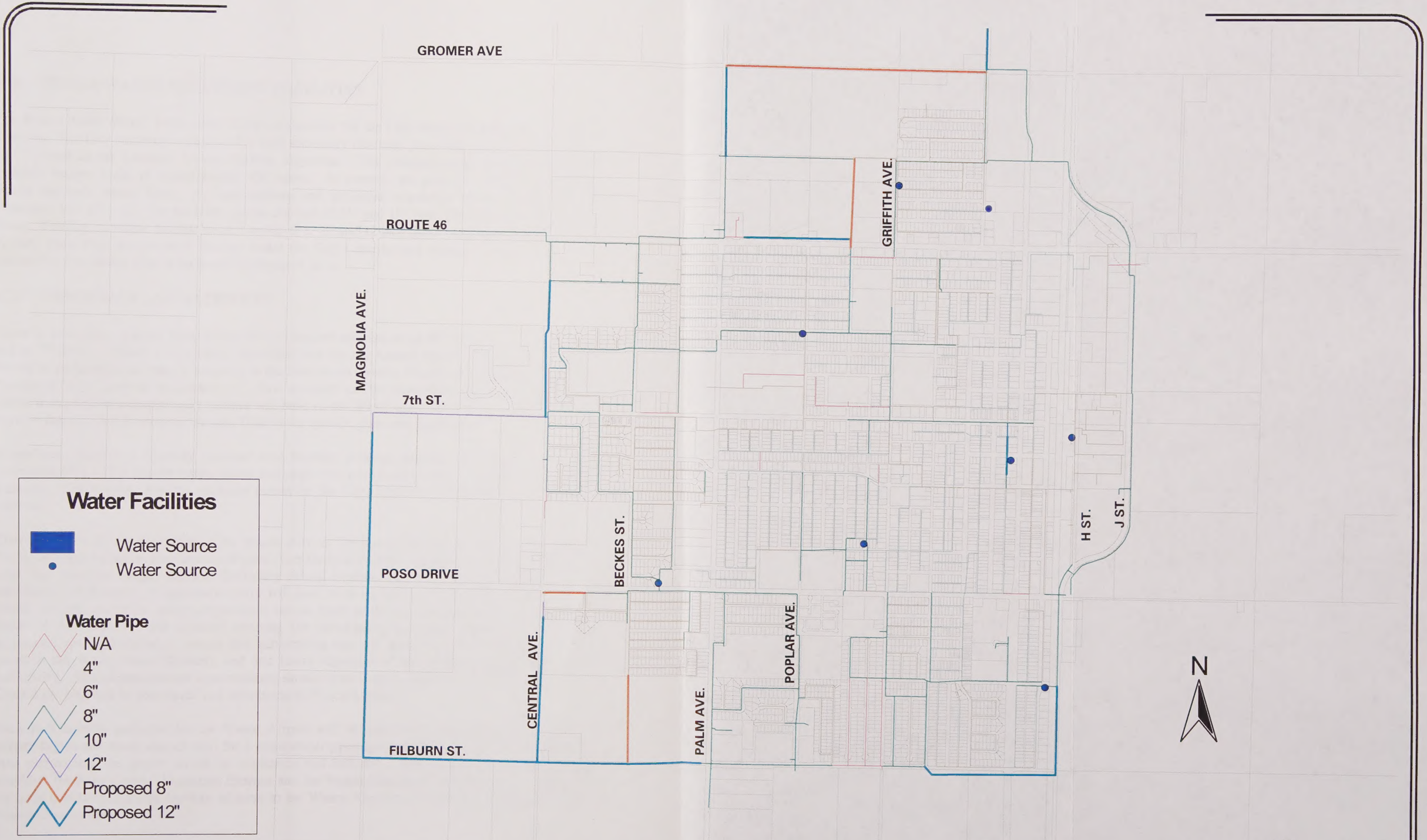


City of Wasco Circulation Element

N.T.S.
Figure 4.8.1

Master Storm Drain Plan

G304003.APR / Storm Drainage



City of Wasco Circulation Element

N.T.S.
Figure 4.9.1

Master Water Plan

G304003.APR / Water

4.10 SEWER/WATER TREATMENT FACILITIES

The Wasco Public Works Department is also responsible for the City sewer and wastewater treatment facilities. The City currently operates a 3.0 mgd secondary treatment plant with trickling filters located on 7th Street at the Leonard Avenue Section alignment. The treatment plan and related disposal facilities occupy a site of approximately 800 acres. At present, the plant has adequate capacity to handle domestic waste flows, for both current and projected population levels (see Wastewater Treatment File (#91-1). The trunkline system consists of 24" and 15" lines flowing westward under 7th Street. Feeding into these trunklines are a series of 8, 10 and 12 inch lines. As in the case of the water system, these lines are primarily located under the City's arterial and collector streets. The City's Master Sanitary Sewer Plan is illustrated in Figure 4.10.1.

4.11 TERMINALS AND GATEWAYS

There is an existing Amtrak Multi-Modal Station located adjacent to the BN & SF Railroad at the east end of 7th Street. Wasco is a regularly scheduled stop for the Amtrak system. The existing terminal should be included as an integral structure in the Downtown Overlay District and should be treated as a "landmark" and "gateway to downtown." This structure and the landscaping adjacent to the railroad tracks is the first impression many visitors will have of the Wasco area, and should be developed in a positive manner (see Downtown Overaly District for specific plans and guidelines).

In addition, there is a privately operated coal transfer terminal railroad spur directly east of the downtown core. This facility loads, stores and ships (via trucks) approximately 900,000 tons of coal annually. This facility is at the southeast corner of the City, between "J" Street and the BN & SF Railroad.

There may also be a need to expand the Wasco Airport Terminal in the future. As the population of Wasco and Kern County grow at a rapid pace, it is likely that airport traffic will slowly increase over time, and that new hangar facilities (including related roadway capacity) and a terminal should be considered. Although it is improbable there will need to be an increase in the size of these facilities within the next ten years, many preparations can be made at this time to safeguard the ultimate end result of the airport. This includes securing the surrounding properties with the A-A (Airport Approach) zoning designation, ensure that surrounding uses are noise tolerant (within the guidelines stated in the Wasco Noise Element), and that future expansion of the runways will be provided for sufficiently. The aforementioned improvements should be an integral part of the City's Comprehensive Circulation plan and be considered and investment in Wasco's future.

Because it is more probable that the Wasco Airport will be used for commercial freight, industrial, charter flights and small aircraft than for a commercial passenger terminal, the most appropriate land uses surrounding the airport would be commerce and industry. This is especially true when one considers the Kern County Circulation Element and the Wasco Circulation Street System's Master Plan for a six lane limited access freeway adjacent to the Wasco Airport as discussed in Chapter 4.1 of the Wasco General Plan.

GROMER AVE.

ROUTE 46

MAGNOLIA AVE.

7th ST.

GRIFFITH AVE.

H ST.

J ST.

CENTRAL AVE.

BECKES ST.

POSO DRIVE

POPLAR AVE.

PALM AVE.

FILBURN ST.

N

Sanitary Sewer Facilities

- Sewer Manhole

Sewer Pipe

- N/A
- 4"
- 6"
- 8"
- 10"
- 12"
- 15"
- 18"
- 24"
- Proposed 8"
- Proposed 12"
- Proposed 18"

City of Wasco Circulation Element

N.T.S.
Figure 4.10.1

Master Sanitary Sewer Plan

G304003.APR / Sewer

4.12 GOALS & POLICIES

The overall goal of the City of Wasco Circulation element is to meet the needs of all residents and visitors for safe, convenient, inexpensive and efficient circulation infrastructure within Wasco and between the City and other parts of the region. The City's first responsibility in the planning and operation of its transportation system is to provide the mobility necessary to its residents in pursuing a wide range of opportunities for work, education, recreation and contact with others. Since all transportation facilities must be shared, at least in part, the transportation system can meet each individual's special needs only to a limited extent. Balances and compromises must be reached, and the end result should be the best increment of service for the lowest cost.

The City should also use the transportation system as a means for guiding development and improving the environment. There must be recognition to a transportation system's impact and conscious design and use of transportation improvements to facilitate desirable change and to preserve what is good. Figure 4.1.1 shows the street network circulation plan and functional street classification for the Wasco urban area. The following general goals and policies are adopted to guide the development and maintenance of the community's circulation system.

A. GENERAL GOALS

1. Provide a coordinated traffic circulation system for motor vehicles and pedestrians, ensuring safe and efficient access to employment, education, commerce and recreation without significant interference to adjacent land uses.

2. Ensure adequate access by emergency vehicles to all areas of the community.

3. Use transportation improvements in the City as catalysts for desirable development, and coordinate new facilities with public and private development.

4. Reduce pollution and noise.

5. Transportation facilities that enhance the landscape.

6. A transportation system that reinforces community identity through improving the linkages among interrelated activities and provide focus for community activities.

B. STREET SYSTEM

Goal 1: Improve existing programs for maintaining and upgrading existing streets and for the construction of street improvements.

Policy 1: Street maintenance, upgrading and construction programs, tasks, and timeline shall include the following:

TABLE 4.12.1
STREET AND INTERSECTION IMPROVEMENTS

Location	Improvement
State Route 46 - Within City Limits	Widen to Four Lanes
Central Avenue – Filburn Street to Highway 43	Widen to Four Lanes
McCombs Road – Central Avenue to Highway 43	Widen to Four Lanes
Filburn Street – Central Avenue to Highway 43	Widen to Four Lanes
State Route 43/J. Street – Within City Limits	Widen to Four Lanes
State Route 46/Central Avenue	Signalize Intersection
State Route 46/Griffith Avenue	Signalize Intersection
State Route 46/State Route 43 (J Street)	Signalize Intersection
Central Avenue/Filburn Street	Signalize Intersection
Palm Avenue/7th Street	Signalize Intersection
Palm Avenue/Poso Drive	Signalize Intersection
Palm Avenue/Filburn Street	Signalize Intersection
Griffith Avenue/7th Street	Signalize Intersection
Griffith Avenue/ Poso Drive	Signalize Intersection
Poso Drive/State Route 43 (F Street)	Signalize Intersection
Poso Drive/ State Route 43 (J Street)	Signalize Intersection

Policy 2: The right-of-way for the circulation system shall be developed and dedicated to the appropriate extent and width in undeveloped areas when development or division of property occurs.

Policy 3: Street widening and right-of-way acquisition in existing developed areas should be undertaken when required for obvious safety reasons, such as trends toward higher accident rates or marked decline in the overall levels of service.

Policy 4: Established truck routes as stated in Section 4.2 shall be maintained. No new truck routes (except as a new freeway designation) shall be allowed.

Policy 5: Collector streets should provide access to traffic generating land uses such as schools, hospitals and recreation areas, but should not extend the entire length of the City in such a manner that would encourage use by through and cross-town traffic.

Policy 6: Arterials should be designed to provide cross-town, through-town and inter-city traffic. Access to abutting land uses should be limited, where possible, to facilitate traffic flow and reduce potential traffic conflicts and hazards. They should not be located adjacent to sensitive land uses nor bisect neighborhoods.

Policy 7: Arterial streets should only intersect with other arterial streets and collectors. Local streets should not be permitted to intersect with arterials. Both Filburn Street (from State Highway 43 to Central Avenue) and Central Avenue (from Filburn Street to State Highway 46) are shall be developed to arterial standards. Poso Drive (from "G" Street to Central Avenue) shall be developed to collector standards.

Policy 8: Local streets shall be designed to limit high speed and through traffic.

Policy 9: Where possible, direct access (driveways) of residential development to arterial and collector streets shall be prohibited.

Policy 10: Ordinances prohibiting overnight truck (tractor-trailer) parking other than in authorized areas of the City shall be developed.

Goal 2: Establish a thoroughfare system in which the function and design of each street are consistent with the character and use of adjacent land.

Policy 1: Divert through automobile and truck traffic from residential neighborhoods onto arterial and collector streets, and limit major thoroughfares to non-residential streets wherever possible.

Policy 2: Design streets for a level of traffic that will not cause a detrimental impact on adjacent land uses.

Policy 3: Eliminate unnecessary cross-traffic conflicts and improve the traffic flow along arterial and collector thoroughfares. Raised medians shall be installed as required to restrict unsafe turning movements, as required.

Policy 4: Promote increased traffic safety, with special attention to hazards that could cause personal injury.

Goal 3: Ensure that the provision of new or enlarged City parking facilities does not adversely affect the livability and desirability of the City and its various neighborhoods.

Policy 1: Discourage the proliferation of surface parking as a general interim land use, particularly where sound residential, commercial or industrial buildings would be demolished pending other development.

Policy 2: Soften the impact of expansive parking areas in all land use designations through landscaping and tree plantings as prescribed in the City Zoning Ordinance.

Policy 3: Maintain street treelines and landscape buffers between parking surfaces and street right-of-ways.

Policy 4: Facilitate and encourage adequate parking throughout the community including all commercial areas.

Policy 5: Restrict long term automobile parking in the downtown area to those city parking lots behind the 7th Street retail corridor.

Policy 6: All new development (except as designated in the Downtown Overlay District) shall provide adequate on-site parking for the on-site uses.

Goal 4: **Encourage the development of secure truck parking facilities in the industrial area of the City.**

Policy 1: Assure that new or enlarged tractor-trailer parking facilities are located on designated truck routes and meet local (including Special Development) design criteria.

Goal 5: **Develop J. Street Between Poso Drive and Northern City Limit as the Logical Extension of State Route 43.**

Policy 1: Assure that the section of J. Street between Poso Drive and the northern City Limit is developed to both City and Caltrans standards as a divided four-lane Arterial Street.

Policy 2: Maintain State Route 43 between Poso Drive and State Route 46 as a two-lane Collector Street.

Goal 6: **Reserve Right-of-Way for Potential State Route 46 By-Pass Facility.**

Policy 1: The City shall assure that sufficient right-of-way is set aside along the McCombs Avenue alignment for the potential State Route 46 By-Pass facility.

Policy 2: The City shall consider additional studies regarding the by-pass and defining alignment for this facility.

C. TRANSIT

Goal 1: **Coordinate regional and local transportation systems and provide inter-line transit transfers.**

The transportation facilities are interdependent, and efforts should be made to ensure an efficient system by coordination of local and regional efforts. The regional and local transit links must be closely related and synchronized to provide maximum efficiency and transfers.

Policy 1: Coordinate the City's dial-a-ride system with AMTRAK and North Kern Regional Transit services.

Policy 2: Encourage AMTRAK and rail departures/arrivals from Wasco by providing safe, secure parking areas for both short and long term.

Goal 2: **Encourage energy efficient and low or non-pollutant generating modes of transportation and circulation system use in both the public and private sectors.**

The City should consider the conversion City owned vehicles to alternative energy sources such as CNG/LNG or electricity. These types of fuel are clean burning and/or emit no emissions. Future city programming should work toward noise control actions along state highways. Another way to decrease noise is to strategically place stop signs in relation to landscaping to avoid substantial noise caused by acceleration and deceleration.

Each type of transit has special advantages or disadvantages for certain types of trips and for certain origins and destinations. The least costly of the most convenient means to satisfy travel demand is not always the best in the context of comprehensive planning. Cost or convenience must usually be balanced against effects on the environment and impact on land use and development patterns. A multi-modal transportation system preserves a wider range of choice and satisfies a larger number of people's transportation needs than a single mode.

Policy 1: Ensure choices among modes of travel and give priority to each mode when and where it is most appropriate. Encourage utilization of the Wasco AMTRAK Multi-Model Transit Station.

Policy 2: Provide incentives for the use of transit, carpools and vanpools.

Policy 3: Improve the speed and efficiency of mass transit in the City and enhance the current status of the existing rail system including passenger service.

Policy 4: Improve pedestrian and handicapped access to AMTRAK Multi-Model Transit Station.

Policy 5: Promote private taxi service to meet the needs of the City and keep fares reasonable.

D. PEDESTRIAN

Goal 1: Assure expanded mobility for the disabled

Expansion of opportunities for the disabled and the poor depend to a certain extent on their mobility and cost of traveling to seek employment. The transportation system must be used in part as a tool for improving the situation of less advantaged residents by providing inexpensive, convenient and reliable service to employment areas as well as recreation, educational and medical services.

Policy 1: Encourage ridership of dial-a-ride and AMTRAK among disabled persons through disabled and senior citizen fare discounts.

Policy 2: The City shall endeavor to meet the needs of the mobility limited population and to encourage, in general, rapid transit, functions of rapid transit, and para-transit in the City of Wasco.

Goal 2: All new developments shall provide sidewalks (in industrial, commercial and residential areas) to facilitate pedestrian traffic

Policy 1: In existing developed areas where sidewalks do not exist, the City shall continue to support existing programs and pursue new programs for sidewalk construction. Bicycle accidents shall continue to be monitored and bicycle paths shall be established upon need.

Policy 2: Provide safe, aesthetic and pleasant space for pedestrians.

Policy 3: Widen sidewalks above the minimum established Improvement Standards where intensive commercial, recreational or institutional activity is present and where residential densities are high.

Policy 4: Partially or wholly close certain streets which are not required for traffic for pedestrian circulation to be used for pedestrian circulation, open space use and density controls.

Policy 5: Ensure convenient and safe pedestrian crossings.

Policy 6: The Historic Downtown Overlay District should be considered an intensive pedestrian atmosphere, with pedestrian linkages to the AMTRAK Multi-Model Transit Station and City parking lots.

E. BICYLCLE TRAFFIC

Goal 1: Implement the Belt Park and Bicycle Trail Circulation Plan and system to accommodate bicycle users.

Policy 1: Establish an effective program including financing for construction of and maintaining bicycle paths and sidewalks in the City of Wasco.

Policy 2: Design bicycle and pedestrian paths so that interaction with vehicular traffic is minimized.

Policy 3: Require the provisions for safe bicycle circulation in all new developments, including bicycle parking facilities and internal bicycle and pedestrian routes.

Policy 4: Provide for the safe and convenient use of the bicycle as a means of transportation and recreation.

Policy 5: Expand and improve bikeways in accordance with State standards, incorporating bicycle trails within the Belt Park system, and the parks.

Policy 6: Eliminate hazards on designated bikeways.

Policy 7: Utilize available bicycle facility funding for projects in Wasco.

Policy 8: Prevent bicycle accidents through promoting bicycle safety education and improved traffic enforcement related to bicycle use.

Policy 9: Provide adequate and secure bicycle storage facilities at all public facility locations throughout the City.

Policy 10: Include facilities for bicycle users in governmental, commercial and residential and open space recreational developments.

F. INFRASTRUCTURE

Airport

Goal 1: **Upon substantial buildout of the City's Industrial Park, the City should consider the expansion of high voltage transmission lines and other industrial capacity infrastructure lines to the east side of the BN & SF Railroad and to the northwest toward the Wasco Airport.**

Policy 1: Encourage economic and industrial expansion to the east and north of the Wasco Airport by providing the necessary infrastructure expansion.

Storm Drainage

Goal 1: **Encourage Storm Drain Retention Basins which may double as recreational areas in designated open spaces.**

Policy 1: Retention basins in residential areas should be located in parks and/or other open spaces; should be landscaped with trees and turf, and be secondly planned for various recreational events such as soccer fields, amphitheaters, etc.

Water

Goal 1: **The City of Wasco should implement additional water conserving techniques on public properties and encourage the same on private properties.**

Policy 1: The City should consider utilizing secondary (treated) effluent for landscape irrigation on public areas such as right-of-way treelines and landscaping, recreational open space irrigation, and other development near the sewer treatment facility.

Policy 2: The City should consider implementing a "night time irrigation" requirement for residential, commercial, industrial, public facilities and open spaces to decrease water usage and evapotranspiration rates; and increase the efficiency of water usage for landscaping.

Please see Table 4.12.2 for Community Services available in the City of Wasco.

TABLE 4.12.2
COMMUNITY SERVICES IN THE CITY OF WASCO
BY SERVICE PROVIDER

Type of Service	Providing Agency
Schools (K-8, inclusive	Wasco Union Elementary School District
Schools (9-12, inclusive)	Wasco Union High School District
Parks & Recreation	Wasco Parks & Recreation District
- zoning	City of Wasco
-administration	City of Wasco
- planning	City of Wasco
- engineering	City of Wasco

- licensing	City of Wasco
- permits	City of Wasco
Police	Kern County Sheriff's Department
Fire Protection	Kern County Fire Department
Street Maintenance	City of Wasco
Domestic Water Service	City of Wasco
Storm Drainage	City of Wasco
Sewer Services/Wastewater	City of Wasco
Treatment Plant	City of Wasco
Electric	Pacific Gas & Electric Co.
Telephone Service	Pacific Bell
Natural Gas	Southern California Gas Co.
Cable Television	Warner Cablevision

APPENDIX

TABLE 1
LEVEL OF SERVICE CRITERIA
FOR SIGNALIZED, UNSIGNALIZED AND ALL-WAY-STOP CONTROLLED INTERSECTIONS

Level of Service	Type of Flow	Delay	Maneuverability	Stopped Delay/Vehicle (sec)		
				Signalized	Unsignalized	All-Way Stop
A	Stable Flow	Very slight delay. Progression is very favorable, with most vehicles arriving during the green phase not stopping at all.	Turning movements are easily made, and nearly all drivers find freedom of operation.	$\leq$ 10.0	$\leq$ 10.0	$\leq$ 10.0
B	Stable Flow	Good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.	Vehicle platoons are formed. Many drivers begin to feel somewhat restricted within groups of vehicles.	> 10 and $\leq$ 20.0	> 10 and $\leq$ 15.0	> 10 and $\leq$ 15.0
C	Stable Flow	Higher delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, although many still pass through the intersection without stopping.	Back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted	> 20 and $\leq$ 35.0	> 15 and $\leq$ 25.0	> 15 and $\leq$ 25.0
D	Approaching Unstable Flow	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	Maneuverability is severely limited during short periods due to temporary back-ups.	> 35 and $\leq$ 55.0	> 25 and $\leq$ 35.0	> 25 and $\leq$ 35.0
E	Unstable Flow	Generally considered to be the limit of acceptable delay. Indicative of poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences.	There are typically long queues of vehicles waiting upstream of the intersection.	> 55 and $\leq$ 80.0	> 35 and $\leq$ 50.0	> 35 and $\leq$ 50.0
F	Forced Flow	Generally considered to be unacceptable to most drivers. Often occurs with over saturation. May also occur at high volume-to-capacity ratios. There are many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors.	Jammed conditions. Back-ups from other locations restrict or prevent movement. Volumes may vary widely, depending principally on the downstream back-up conditions.	> 80.0	> 50.0	> 50.0

References: Highway Capacity Manual, Special Report No. 209, Transportation Research Board, Updated December 1997.

TABLE 2
LEVEL OF SERVICE THRESHOLD VOLUMES
FOR URBAN/SUBURBAN ROADWAY TYPES

Roadway Type	Total Daily Vehicles in Both Directions (ADT)				
	Level of Service A	Level of Service B	Level of Service C	Level of Service D	Level of Service E
6-Lane Arterial (with left-turn lane – no parking)	32,000	38,000	43,000	49,000	54,000
4-Lane Arterial (with left-turn lane – with restricted parking)	22,000	25,000	29,000	32,500	36,000
4-Lane Collector (with left-turn lane – no parking)	18,000	21,000	24,000	27,000	30,000
2-Lane Collector (with left-turn lane – with parking)	11,000	12,500	14,500	16,000	18,000
2-Lane Collector (undeveloped 24 foot section)	6,000	7,500	9,000	10,500	12,000
Local Street (Residential)	500	1,500	3,000	3,500	5,000

ADT = Average Daily Traffic

Note:

1. *Based on "Highway Capacity Manual", Transportation Research Board, 1997.*
2. *All volumes are approximate and assume ideal roadway characteristics. Actual threshold volumes for each Level of Service listed above may vary depending on a number of factors including curvature and grade, intersection or interchange spacing, percentage of trucks and other heavy vehicles, lane widths, signal timing, on-street parking, amount of cross traffic and pedestrians, driveway spacing, etc.*

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